



**List of Acceptable Plastics for  
Optical Lenses and Reflex Reflectors  
Used on Motor Vehicles**

December 2011



***AMECA***

---

**List of**

**Acceptable Plastics for**

**Optical Lenses and Reflex Reflectors**

**Used on Motor Vehicles**

---

**December 2011 Edition**

**Automotive Manufacturers Equipment Compliance Agency, Inc.  
1025 Connecticut Avenue, NW Suite #1012  
Washington DC 20036**

**[www.ameca.org](http://www.ameca.org)**

## 1. STATUS

The following materials have been accepted by the Automotive Manufacturers Equipment Compliance Agency as meeting the 3-year weathering test of SAE J576 (as amended in 49 CFR 571.108 S5.1.2) for plastics used in optical lenses and reflectors used on motor vehicles. No evaluation has been made as to the suitability of individual materials for particular automotive uses, or to the manufacturing methods.

***You must contact the resin or coating manufacturer to determine the best material for your application.***

***Every plastics resin manufacturer has specialized products for different applications, processing conditions, manufacturing equipment, light sources and final use.***

***Please contact the manufacturer directly for more information.***

The device manufacturers must ensure that the lenses molded from acceptable materials meet the color and plastic stability test requirements for each individual device.

## 2. LISTING

The material is listed by the manufacturer's name, trade name and flow formulation, type of resin, color number and color.

## 3. MATERIAL COATINGS AND HAZE

When these materials are used for state/provincial regulated lighting device lenses, the applicable state/provincial regulations shall be met.

Criteria: Reflex reflectors shall meet the haze requirements of SAE J576, paragraph 4.2.3 (under 7%).  
Other forward lighting: 30 % see 49 CFR 571.108 S5.1.2 (b)

Background: Reflex reflectors go through three layers of plastic (outer lens, internal reflection in the reflector and the outer lens again). Consequently, the haze requirements for lenses incorporating a reflex reflector must be less than 7%. If a lens does NOT incorporate a reflex it can have up to 30% haze.

The Code "#" denotes material which must be coated to pass the 7% haze requirement for use in lenses of reflex reflectors or in lenses in front of reflex reflectors. This material does **not** need to be coated to meet the 30% haze requirement. This material is acceptable for lighting equipment required by 49 CFR 571.108 S5.1.2 when coated with the proper coating.

The Code "Q" denotes material that must be coated to pass the weathering test. The material may be used for any device after it is so coated.

The Code "\$" denotes material with haze values between 7% and 30%. This material **cannot** be used in lenses **of** reflex reflectors or in lenses **in front** of reflex reflectors even if coated.

The Code "&" denotes a material with **under 7%** haze when coated but unusable when uncoated.

The Code "@" denotes a material with **over 7%** haze when coated but unusable when uncoated.

The Code "!" denotes a material that does not require a coating to be used as an inner lens when protected by an outer lens designated by Code "#". These materials have been tested *together* as a *system* and together they will meet FMVSS 108.

#### 4. DISTRIBUTION

This list is distributed free on a semiannual basis and is subject to change twice a year. Any revised or pre-release editions may be obtained by contacting AMECA.

#### 5. DEFINITIONS

Coating -- Material applied to surface of the lens to improve some aspect of performance.

Coated materials-- a material which has a coating applied to the surface of the finished sample to impart some protective properties. Coating identification means a mark of the manufacturer's name, formulation designation number, and recommendations for application.

Color bleeding -- the migration of color out of a plastic part onto the surrounding surface.

Cracking -- a separation of adjacent sections of a plastic material with penetration into the specimen.

Crazing -- a network of apparent fine cracks on or beneath the surface of materials.

Delamination -- a separation of the layers of a material including coatings.

Hard Coat --     1) Coating which is cured by UV radiation.  
                  2) Coating which provides additional resistance to abrasion or scratching which may be cured by thermally or by UV radiation. May contribute to long term durability of material.

**NOTE:** Both definitions are being used--please verify the intended performance when discussing hard coats.

Haze -- the cloudy or turbid appearance of an otherwise transparent specimen caused by light scattered from within the specimen or from its surface.

UV-protective Coat -- Coating designed to provide additional protection from the sun's electromagnetic radiation, particularly those wavelengths in the UV bandwidth. Often used on polycarbonate substrates to improve weathering performance. Polycarbonates must be coated for use in or in front of reflex reflectors.

Reflex reflectors-- devices used on vehicles to give an indication to approaching drivers using reflected light from the lamps of the approaching vehicle.

Substrate -- Base material to which all other performance enhancing materials are added.

UV radiation -- Short wavelength, high energy radiation emitted by the sun or other object (HID lamp). Wave lengths between 10 and 380 nm.

HID Lamp -- High Intensity Discharge Lamp. Lamps produce light by the use of a stabilized arc. Lamps can produce significant UV radiation which may require special materials. See SAE J-1647

## 6. NOTE ON COLOR

The colors listed have been determined to be in compliance with SAE J-578 using the ASTM E 308-66 method required by FMVSS 108 or in thicknesses specified by the resin manufacturer (SAE J576 S4.1).

**NOT EVERY COLOR LISTED WILL MEET SAE J-578 COORDINATES  
FOR YOUR INTENDED THICKNESS**

**NOT EVERY MATERIAL IN EVERY COLOR WILL MEET J578 WITH  
LED OR ILLUMINANT C LIGHTSOURCES**

**CHECK WITH THE RESEN MANUFACTURER'S COLOR SPECIALIST**

The ASTM E 308-66 method uses an illuminant A light source energized to 2856k. *If you use anything other than an incandescent light source at 2856k you MUST verify that the resulting color meets the specifications of SAE J-578 for your intended thickness.* Halogen light sources at 3200k, illuminant C (strobe) and LED light sources will dramatically alter the color output. In addition, some light sources do not emit color or luminous flux uniformly. Measurements should be made to verify that the emitted light using your intended lightsource meets the specifications of J-578 throughout its photometric range.

## 7. NOTE ON INNER LENS COLOR

***Combinations of inner and outer lenses with various colors may not perform predictably. Output will vary markedly with different light sources. Check with the resin manufacturer's color specialist when making selections***

## 8. NOTE ON "EQUIVALENT" FORMULATIONS.

Many companies have distributed manufacturing facilities, cooperative agreements or joint ventures. In order to list a facility or another company the company which has done the three year weathering testing must send documentation stating that the materials, processes and end products are equivalent between itself and the new applicant. Due to industry complaints, the List of Acceptable Plastics has revised the listing to more accurately reflect the test data from various parent companies. ***In addition, if the joint venture is terminated or the manufacturing facility is sold, the subsidiary or joint company must be able to provide weathering test data on its own. A company can no longer rely on the parent company data and processes if they have no relationship to the parent company who conducted the original testing.***

## 9. NOTE ON SAE J-576 FORMATTING

In 2003 SAE reformatted J576 JUL91. Section 2 "References" was split into two sections, Section 2, References and Section 3 Definitions. Please check the formatting used during communication and verify you are referring to the same edition.

## 10. NOTE ON SUBMITTING FOR ADDITIONAL COLORS

If you plan to add an additional color number to your listing, please list the existing colors which have undergone the three year weathering that are a greater and lesser concentration. The colors listed MUST be in the same color space. See SAE J576, JUL91 Section 4.1

### **11. Note on FMVSS 108 Rewrite published December 4, 2007.**

We are including both the 2007 edition of FMVSS 108 for plastics and the rewritten version. There are some significant differences. Including specifying additional thicknesses, color requirements before and after testing and others. If you have any issues with the proposed changes, please write to the address below.

U.S. Department of Transportation  
NHTSA Correspondence Unit  
1200 New Jersey Avenue, SE, Room W41-306  
Washington, D.C. 20590

### **11. Note on Inner Lens Testing**

Currently the DOT has issued no guidelines for inner lenses. If and when they do, they will be the requirements that everyone must follow. In the meantime, we would recommend for following guidelines for inner lens test setup.

- 1) You must test every color combination you want to use—red, blue, amber, etc.
- 2) You must test every molecular weight for both outer lens and inner lens.
- 3) The test setup—airspace, ventilation, should duplicate as close as possible the conditions in an inner automotive lens including factors such as ventilation, spacing between inner and outer lens and coatings.
- 4) In our opinion, the thinnest lens may be used as the outer lens as that would be the worst case scenario.
- 5) For more information, please see SAE Paper: <http://papers.sae.org/2004-01-0800>

### **12. Special Note on the definition of “Protected Inner Lens” and/or “Protected Applications”**

**Protected Inner Lenses or Protected Applications for polycarbonate lenses refers to an outer lens which has a UV absorbing capabilities. NOT physical protection but UV protection.**

## Frequently Asked Questions

Q1) If someone else has weathered a polycarbonate/PMMA material, do I have to weather my polycarbonate/PMMA material?

A) Yes, every company's material stands independently from what another company has done. Each coating, pigment and additive must be tested with each company's own material. Each separate material stands alone for weathering performance unless bracketed by materials of higher and lower concentrations or molecular weights.

Q2) If someone else has weathered a pigment with another plastic do I have to weather the pigment with my plastic?

A) Yes, every company's material stands independently from what another company has done. Each coating, pigment and additive must be tested with each company's own material. Each separate material stands alone for weathering performance unless bracketed by materials of higher and lower concentrations or molecular weights.

Q3) If someone else has weathered a coating do I have to weather my material with that coating?

A) Yes, every company's material stands independently from what another company has done. Each coating, pigment and additive must be tested with each company's own material. Each separate material stands alone for weathering performance unless bracketed by materials of higher and lower concentrations or molecular weights.

Q4) Testing laboratories typically use a 1-10 numbering scale according to ASTM D660 to indicate the degree of crazing, cracking or delamination associated with weathering. What numerical value from ASTM D660 is acceptable for listing?

A) FMVSS 108 does not refer to any numerical values from ASTM D660. The numerical values are done by the test laboratory for manufacture convenience. FMVSS 108 Section 5.1.2 (a) refers to SAE J-576 which says:

SAE J576 Section 5.2.4 APPEARANCE—The exposed samples when compared with the unexposed controls shall not show physical changes affecting performance such as color bleeding, delamination, crazing, or cracking.

In addition, the rewrite of FMVSS 108 states:

S14.4.2.2.4.2 After completion of the outdoor exposure test materials used for headlamp lenses must show no deterioration.

S14.4.2.2.4.3 After completion of the outdoor exposure test all materials, when compared with the unexposed control samples, must not show physical changes affecting performance such as color bleeding, delamination, crazing, or cracking. **Additionally materials used for**

**reflex reflectors and lenses used in front of reflex reflectors must not show surface deterioration or dimensional changes.**

Your tested samples must not show any changes affecting performance. The only value which shows no change is a numerical value of 10.

Q5) How many thicknesses to I have to test?

A) FMVSS 108 Rewrite: S14.4.2.1.3 Samples must be furnished in thicknesses of  $1.6 \pm 0.25$  mm,  $2.3 \pm 0.25$  mm,  $3.2 \pm 0.25$  mm, and  $6.4 \pm 0.25$  mm.

Q6) Even if it's for a coating?

A) Yes.

Q7) Do materials have to meet the color requirements before testing?

A) Yes: S14.4.2.1.4 All samples must conform to the applicable color test requirement of this standard prior to testing.

Q8) What about the plastics used in non-FMVSS applications such as emergency vehicle lighting which also require three year weathering?

A) Yes, those can be listed with non-standard colors as long as they are NOT used on FMVSS 108 lighting devices.

Testing outline. Note, we also recommend you send DOUBLE samples to prevent any errors.

- ▶ 3 Thicknesses (4 if rewrite is approved)
  - For each colour
  - For each coating
  - For each molecular weight (MW)
- ▶ For example:
  - 3 thickness samples of dark red, uncoated, Lowest MW
  - 3 thickness samples of light red, uncoated, Lowest MW
  - 3 thickness samples of dark red, uncoated, Highest MW
  - 3 thickness samples of light red, uncoated, Highest MW
  
  - 3 thickness samples of dark red, coating 1, Lowest MW
  - 3 thickness samples of light red, coating 1, Lowest MW
  - 3 thickness samples of dark red, coating 1, Highest MW
  - 3 thickness samples of light red, coating 1, Highest MW
  
  - Now repeat for clear, yellow, blue, coating 2 & coating 3

## Table of Contents

<b>ARKEMA INC. ALTUGLAS DIVISION</b> .....	<b>1</b>
<b>ARKEMA ITALIA ALTUGLAS DIVISION</b> .....	<b>4</b>
<b>ARKEMA KOREA ALTUGLAS DIVISION</b> .....	<b>5</b>
<b>ASAHI CHEMICAL</b> .....	<b>6</b>
<b>BAYER MATERIALSCIENCE AG (EUROPE)</b> .....	<b>9</b>
<b>BAYER MATERIALSCIENCE LLC (AMERICA)</b> .....	<b>15</b>
<b>BAYER MATERIALSCIENCE LTD. (ASIA PACIFIC)</b> .....	<b>25</b>
<b>CHIMEI CORPORATION</b> .....	<b>29</b>
<b>CHIMEI CORPORATION ZHENJIANG CHINA</b> .....	<b>29</b>
<b>DAESAN MMA CORP.</b> .....	<b>31</b>
<b>DAICEL POLYMER LTD.</b> .....	<b>32</b>
<b>DIAPOLYACRYLATE CO., LTD.</b> .....	<b>33</b>
<b>EVONIK CYRO LLC, EVONIK RÓHM, EVONIK DEGUSSA CHINA.</b> .....	<b>37</b>
<b>FORMOSA IDEMITSU PETROCHEMICAL CORP.</b> .....	<b>39</b>
<b>IDEMITSU KOSAN CO., LTD.</b> .....	<b>40</b>
<b>KURARAY CO. LTD.</b> .....	<b>42</b>
<b>LG CHEM, LTD.</b> .....	<b>45</b>
<b>LUCITE INTERNATIONAL (U.K.)</b> .....	<b>47</b>
<b>MEP EUROPE BV</b> .....	<b>49</b>
<b>mitsubishi engineering plastics corp.</b> .....	<b>50</b>
<b>MITSUBISHI RAYON</b> .....	<b>56</b>
<b>MITSUBISHI RAYON POLYMER NANTON CO., LTD.</b> .....	<b>62</b>
<b>NANTONG RAYON CHEMICAL CO., LTD.</b> .....	<b>65</b>
<b>NIPPON STEEL CHEMICAL CO., LTD.</b> .....	<b>68</b>
<b>PLASKOLITE INC.</b> .....	<b>69</b>
<b>QUINN PLASTICS GMBH</b> .....	<b>71</b>
<b>RYOKO CO., LTD.</b> .....	<b>72</b>
<b>SABIC INNOVATIVE PLASTICS USA</b> .....	<b>75</b>
<b>SABIC INNOVATIVE PLASTICS AUSTRALIA</b> .....	<b>79</b>
<b>SABIC INNOVATIVE PLASTICS NAHSHA CHINA</b> .....	<b>83</b>
<b>SABIC INNOVATIVE PLASTICS SHANGHAI CHINA</b> .....	<b>87</b>
<b>SABIC INNOVATIVE PLASTICS EUROPE</b> .....	<b>91</b>
<b>SABIC INNOVATIVE PLASTICS JAPAN</b> .....	<b>95</b>
<b>SABIC INNOVATIVE PLASTICS KOREA</b> .....	<b>99</b>
<b>SABIC INNOVATIVE PLASTICS SINGAPORE</b> .....	<b>102</b>
<b>SAM YANG CORPORATION</b> .....	<b>106</b>
<b>STYRON NETHERLANDS BV</b> .....	<b>108</b>
<b>SUMITOMO CHEMICAL CO., LTD.</b> .....	<b>109</b>
<b>SUMITOMO CHEMICAL SINGAPORE PTE CO., LTD.</b> .....	<b>111</b>
<b>SUMITOMO CHEMICAL EUROPE S.A./N.V.</b> .....	<b>113</b>
<b>SUMIKA STYLON POLYCARBONATE LIMITED</b> .....	<b>115</b>
<b>TEIJIN CHEMICALS</b> .....	<b>117</b>
<b>TEIJIN POLYCARBONATE CHINA LTD.</b> .....	<b>121</b>
<b>TEIJIN POLYCARBONATE SINGAPORE PTE LTD.</b> .....	<b>126</b>
<b>THAI POLYCARBONATE CO., LTD.</b> .....	<b>130</b>
<b>RESARBRAS DA BAHIA S.A.</b> .....	<b>132</b>
<b>UNIGEL PLASTICS</b> .....	<b>132</b>
<b>UNITIKA LTD.</b> .....	<b>134</b>
<b>WISCOM ENGINEERING PLASTIC (WUXI) CO. LTD.</b> .....	<b>135</b>
<b>INDEX OF COMPANIES AND MATERIALS</b> .....	<b>136</b>
<b>APPENDIX A: FEDERAL STANDARD AND NOTABLE INTERPRETATION DOCUMENTS REGARDING PLASTICS</b> .....	<b>138</b>

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Arkema Inc.	ALTUGLAS or	POLYMETHYL	P2	Clear
Altuglas	PLEXIGLAS	METHACRYLATE	UVA5	Clear
Division	V(022)		100	Clear
	V(040)		101	Clear
www.arkemagroup.com	V(052)		102	Clear
	V(052)I		366	Red
(Formerly	V(415)		461	Red
Atofina	V(811)		610	Red
Chemicals, Inc.	V(811)UVA		616	Red
Atoglas	V(825)		659	Red
Division)	V(825)T		756	Red
	V(825)TP		868	Red
	V(826)		908	Red
	V(920)		957	Red
	V(920)T		1101	Red
	HT(121)		1108	Red
			1118	Red
			1175	Red
			18008	Red
			18016	Red
			18035	Red
			18036	Red
			18037	Red
			18039	Red
			18040	Red
			18042	Red
			18043	Red
			18044	Red
			18046	Red
			18047	Red
			18048	Red
			18134	Red
			18152	Red
			18165	Red
			18166	Red
			18175	Red
			18176	Red
			18181	Red
			18205	Red
			18210	Red
			18213	Red
			18227	Red
			18228	Red
			18229	Red
			18236	Red
			18241	Red
			18242	Red
			18244	Red
			18249	Red
			18250	Red
			18254	Red
			18287	Red
			883	Yellow
			885	Yellow
			937	Yellow
			938	Yellow

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Arkema Inc.	ALTUGLAS or	POLYMETHYL	951	Yellow
Altuglas Division	PLEXIGLAS	METHACRYLATE	28019	Yellow
	V(022)		28020	Yellow
www.arkemagroup.com	V(040)		28021	Yellow
	V(052)		28029	Yellow
(Formerly	V(052)I		28033	Yellow
Atofina	V(415)		28039	Yellow
Chemicals, Inc.	V(811)		28040	Yellow
Atoglas	V(811)UVA		28041	Yellow
Division)	V(825)		28042	Yellow
	V(825)T		28043	Yellow
	V(825)TP		28044	Yellow
	V(826)		28090	Yellow
	V(920)		28107	Yellow
	V(920)T		28152	Yellow
	HT(121)		28154	Yellow
			28161	Yellow
			28162	Yellow
			28163	Yellow
			28198	Yellow
			28209	Yellow
			28210	Yellow
			28213	Yellow
			28223	Yellow
			28226	Yellow
			28921	Yellow
			770	Blue
			779	Blue
			48268	Blue
			7082	Gray
			7090	Gray
			7132	Gray
			7137	Gray
			7155	Gray
			7157	Gray
			7161	Gray
			7189	Gray
			7191	Gray
			7192	Gray
			7215	Gray
			7280	Gray
			58102	Gray
			58200	Gray
			58224	Gray
			58225	Grey
			58235	Gray
			58247	Gray
			58294	Gray
			58308	Grey
			78072	Bronze
			78048	Bronze

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Arkema Inc.	ALTUGLAS H	POLYMETHYL	100	Clear
Altuglas Division	PLEXIGLAS H	METHACRYLATE	15000	Red
			15003	Red
www.arkemagroup.com			25000	Yellow
			25001	Yellow
			25004	Yellow
Arkema Inc.	ALTUGLAS DR	POLYMETHYL	100	Clear
Altuglas Division	PLEXIGLAS DR	METHACRYLATE	101	Clear
	ALTUGLAS DRF		16020	Red
www.arkemagroup.com	PLEXIGLAS DRF		16030	Red
			16031	Red
(Formerly Atofina Chemicals Atoglas Division)			26022	Yellow
			26038	Yellow
Arkema Inc.	IMPLEX	POLYMETHYL	100	Clear
Altuglas Division	ALTUGLAS MC	METHACRYLATE	101	Clear
www.arkemagroup.com	PLEXIGLAS MC			
(Formerly Atofina Chemicals Atoglas Division)				
Arkema Inc.	ALTUGLAS MI-2T	POLYMETHYL	100	Clear
Altuglas Division	ALTUGLAS MI-7	METHACRYLATE	101	Clear
	ALTUGLAS MI-7T		16500	Red
www.arkemagroup.com	PLEXIGLAS MI-2T		16501	Red
	PLEXIGLAS MI-7		26045	Yellow
	PLEXIGLAS MI-7T		26500	Yellow
			26501	Yellow
(Formerly Atofina Chemicals Atoglas Division)			26505	Yellow

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Arkema Italia	ALTUGLAS GR 8	POLYMETHYL	11	Clear
Altuglas Division	ALTUGLAS GR 8C	METHACRYLATE	13	Red
	ALTUGLAS GR 9D		119	Red
www.arkemagroup.com	ALTUGLAS GR 9DX		119/3	Red
	ALTUGLAS GR 9E		119/8	Red
(Formerly Atofina Chemicals Atoglas Division)			119/10	Red
			126	Red
			145	Red
			1794	Red
			180	Red
			1003	Red
			1025	Red
			1032	Red
			1110	Red
			1115	Red
			1116	Red
			1120	Red
			1132	Red
			1175	Red
			1180	Red
			1185	Red
			1190	Red
			1191	Red
			1195	Red
			237	Yellow
			245	Yellow
			263	Yellow
			268	Yellow
			282	Yellow
			283	Yellow
			283/3	Yellow
			283/8	Yellow
			283/B-3	Yellow
			283/B-8	Yellow
			285	Yellow
			2361	Yellow
			2820	Yellow
			2821	Yellow
			2830	Yellow
			2831	Yellow
			2833	Yellow
			2838	Yellow

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Arkema Korea	ALTUGLAS	POLYMETHYL	461	Red
Altuglas	PLEXIGLAS	METHACRYLATE	908	Red
Division	V(040)		18048	Red
			883	Yellow
			28021	Yellow
			28033	Yellow
			58200	Gray
			58247	Gray
			78072	Bronze
			78048	Bronze

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Asahi Chemical www.asahi-kasei.co.jp	DELMORE H-350A	POLYMETHACRYLIC	99141	Clear
	ANHYDRIDE ACRYLIC		D33144	Red
			D23084	Yellow
Asahi Chemical www.asahi-kasei.co.jp	DELPET 70H	POLYMETHYL METHACRYLATE	99141	Clear
	DELPET 70N		31140	Red
	DELPET 80N		31141	Red
	DELPET 80NB		31142	Red
	DELPET 80NE		31143	Red
	DELPET 80NF		31144	Red
	DELPET 80NP		31145	Red
	DELPET 80NR		31151	Red
	DELPET 80NS		31152	Red
	DELPET 800F		31153	Red
	DELPET 80EB		33140	Red
			33141	Red
			33142	Red
			33143	Red
			33144	Red
			33151	Red
			33153	Red
			33170	Red
			33232	Red
			33233	Red
			33261	Red
			33340	Red
			21102	Yellow
			21104	Yellow
			21106	Yellow
			21107	Yellow
			21108	Yellow
	21109	Yellow		
	21110	Yellow		
	21111	Yellow		
	21207	Yellow		
	21301	Yellow		
	21511	Yellow		
	21802	Yellow		
	21803	Yellow		
	21834	Yellow		
	23080	Yellow		
	23082	Yellow		
	23083	Yellow		
	23084	Yellow		
	23090	Yellow		
	23091	Yellow		
	23100	Yellow		
	23102	Yellow		
	23103	Yellow		
	23501	Yellow		
	23502	Yellow		
	23503	Yellow		
	23505	Yellow		

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Asahi Chemical	DELPET 70H	POLYMETHYL METHACRYLATE	23506	Yellow
	DELPET 70N		23507	Yellow
www.asahi-kasei.co.jp	DELPET 80N		9814	Gray
	DELPET 80NB		9834	Gray
	DELPET 80NE		9870	Gray
	DELPET 80NF		90810	Gray
	DELPET 80NP		90811	Gray
	DELPET 80NR		90813	Gray
	DELPET 80NS		90816	Gray
	DELPET 800F		90817	Gray
	DELPET 80EB		90818	Gray
			90821	Gray
			90823	Gray
			90825	Gray
			90827	Gray
			90828	Gray
			90832	Gray
			90836	Gray
			90837	Gray
		90838	Gray	
		90841	Gray	
		90844	Gray	
		90848	Gray	
		90853	Gray	
		90854	Gray	
		90861	Gray	
		90866	Gray	
		90875	Gray	
		90876	Gray	
		90878	Gray	
		90879	Gray	
		90881	Gray	
		90882	Gray	
		90883	Gray	
		90884	Gray	
		90885	Gray	
		90886	Gray	
		90888	Gray	
		90889	Gray	
		90899	Gray	
<hr/>				
Asahi Chemical	DELPET SR	POLYMETHYL METHACRYLATE	99141	Clear
			33151	Red
www.asahi-kasei.co.jp			23100	Yellow
			90810	Gray
			90817	Gray
<hr/>				
Asahi Chemical www.asahi-kasei.co.jp	STYLAC-AS XT-751	STYRENE/ ACRYLONITRILE COPOLYMER	SR 40501	Yellow
<hr/>				

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Asahi Chemical  www.asahi-kasei.co.jp	STYLAC-AS XT-753 COPOLYMER	STYRENE/ ACRYLONITRILE	SR 40113	Clear
			SR 40417	Red
			SR 40418	Red
			SR 40422	Red
			SR 40429	Red
			SR 40524	Yellow
			SR 40525	Yellow
			SR 40531	Yellow
			SR 40536	Yellow
SR 40539	Yellow			

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Bayer MaterialScience AG (Europe) www.bayermaterialscience.com	APEC 1603	HIGH-HEAT POLYCARBONATE	550042	Clear Q
	APEC 1703		551022	Clear Q
	APEC 1803		550674	Clear Q
	(coated)		350335	Red Q
			250322	Yellow Q
			250339	Yellow Q

Coated Bayer MaterialScience AG (Europe) Apec plastics may only be treated with the following acceptable coatings applied to the molded lens.

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101, Acryking PH-220, Acryking PH-328: See Mitsubishi Rayon Co., Ltd.

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3: See Fujikura Kasei Co., Ltd.

LS123: See NB Coatings

PHC 587C: Momentive Performance Materials Inc.

Stanley SH-41: See Stanley Electric

UVHC3000, UVHC3000K1, UVHC3000K-Z: Momentive Performance Materials Inc.

UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7 and UVT610V8: See Red Spot

V88VC31: See Sherwin-Williams

#### **Coating Manufacturer in Alphabetical Order**

Information on Acryking F-328, Acryking K-101, Acryking PH-220, and Acryking PH-328 coatings may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-Chome, Minato-Ku  
Tokyo 108-8506, Japan  
www.mrc.co.jp

NOTE: Acryking K-101 is NOT suitable for use with or in front of a reflex reflector

Information on FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3 coatings may be obtained by writing:

Fujikura Kasei Co., Ltd.  
6-15 Shibakeon 2-Chome Minato-Ku  
Tokyo, 105-0011, Japan  
www.fkkasei.co.jp

NOTE: FUJIHARD HH2551U series is only suitable for use on APEC 1803

NOTE: FUJIHARD HH2551U series data was submitted by Fujikura Kasei

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

(Coating information continued on the next page)

Information on UVHC3000, UVHC3000K1, UVHC3000K-Z, PHC 587C hard coat may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 www.momentive.com
---	---

NOTE: UVHC3000 is only acceptable for use on Apec 1603  
 NOTE: UVHC3000K1, UVHC3000K-Z only APEC 1703 and APEC 1803  
 NOTE: UVHC3000K1, UVHC3000K-Z, PHC 587C submitted by Momentive Performance Materials Inc.

Information on UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7 and UVT610V8 coatings may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
 P.O. Box 418  
 Evansville, IN 47703-0418  
 www.redspot.com

NOTE: UVT200 tested on clear samples only.  
 NOTE: UVT610V tested on clear APEC 1803  
 NOTE: All UVT test data submitted by Red Spot.

Information on LS123 coating hard coat may be obtained by writing to the following address:

NB Coatings, Inc.  
 North American Headquarters  
 2701 E. 170th Street  
 Lansing, IL 60438  
<http://www.nbcoatings.com/>  
 1-800-323-3224

Information on Permaclear V88VC31 coating may be obtained by writing to the following address:

Sherwin-Williams Automotive Finishes Corp.  
 388 Robins Drive  
 Troy, MI 48083  
 www.sherwin-automotive.com

Information on SH-41 hard coat may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
 2-9-13, Nakameguro, Meguro-KU  
 Tokyo 153, Japan  
 www.stanley.co.jp

NOTE: Stanley SH-41 is only acceptable for use on Apec 1803

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Bayer MaterialScience AG (Europe) <a href="http://www.bayermaterialscience.com">www.bayermaterialscience.com</a>		POLYCARBONATE	550012	Clear #
	MAKROLON 2407		550391	Clear #
	MAKROLON 2607		550392	Clear #
	MAKROLON 2807		550394	Clear #
	MAKROLON 3103		550395	Clear #
	MAKROLON AL2247 Protected Applications Only		550396	Clear #
	MAKROLON AL2447		550660	Clear #
	MAKROLON AL2447 MAS165		550674	Clear #
	MAKROLON AL2647 MAS331		551104	Clear #
	MAKROLON AL2647		551070	Clear #
	MAKROLON AL2847		350391	Red #
	MAKROLON AL3147		350392	Red #
	MAKROLON LED2045 Color 000000 Protected Applications Only		350393	Red #
	MAKROLON LED2245 Color 000000 Protected Applications Only (coated or uncoated)		350394	Red #
			357866	Red #
			250210	Yellow #
			250391	Yellow #
			250392	Yellow #
			250393	Yellow #
			256866	Yellow #
			256909	Yellow#
			250395	Yellow #
			558889	Blue #
			750390	Gray #
			750391	Gray #
			750392	Gray #

Coated Bayer MaterialScience AG (Europe) Makrolon and Makrolon AL plastics may only be treated with the following acceptable coatings applied to the molded lens.

Note: Color 550674 is available on AL2647

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

ACRIPLEX 100PSR/100SR: See Röhm GmbH & Co. KG

Acryking F-328, Acryking K-101, Acryking K-103, Acryking PH-220, Acryking PH-328, Acryking PH-700 and Acryking PH-710: See Mitsubishi Rayon Co., Ltd.

FUJIHARD 2540U, FUJIHARD 2540U-1, FUJIHARD 2540U-2: See Fujikura Kasei Co., Ltd.

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3: See Fujikura Kasei Co., Ltd.

FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9: See Fujikura Kasei Co., Ltd.

FUJIHARD 2570U, FUJIHARD 2570U-1, FUJIHARD 2570U-2: See Fujikura Kasei Co., Ltd.

KUV-1000: See KCC Corporation

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

LHP100/LHC100: See Momentive Performance Materials, Inc.

LS123: See NB Coatings

Permaclear IV: See Sherwin Williams

PHC587, PHC 587C hard coat: See Momentive Performance Materials, Inc.

SH-41 and SH-50 hard coats: See Stanley Electric

SHP300/SHC3000, SHP401/AS4000, SHP401/SHC4002, SHP470/AS4700: See Momentive Performance Materials Inc

UVHC3000, UHVC3000K, UHVC3000K1, and UHVC3000K-Z hard coats: See Momentive Performance Materials Inc.

UVT200V1, UVT200V2, UVT200V3, UVT200V5 coatings: See Red Spot

UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coatings: See Red Spot

V88VC31 coatings: See Sherwin Williams

#### **Coating Manufacturer by Alphabetical Order**

Information on KUV-1000 coatings may be obtained by writing:

KCC Corporation  
83 Mabook-Dong, Giheung-Gu, Yongin-Si  
Gyunggi-Do, South Korea  
[www.kccworld.co.kr](http://www.kccworld.co.kr)

NOTE: KUV-1000 was tested on 6.4mm lens thickness only

NOTE: Information on KUV-100 was submitted by KCC Corporation

Information on FUJIHARD 2540U, FUJIHARD 2540U-1, FUJIHARD 2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD 2570U, FUJIHARD 2570U-1, FUJIHARD 2570U-2 coatings may be obtained by writing:

Fujikura Kasei Co., Ltd.  
6-15 Shibakeon 2-Chome Minato-Ku  
Tokyo, 105-0011, Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

NOTE: FUJIHARD HH2540U-series, FUJIHARD HH2551U-series, FUJIHARD HH2561U-series, FUJIHARD HH2570U-series is only for use on clear MAKROLON AL2447 and MAKROLON 2647

NOTE: FUJIHARD HH2541U-series, FUJIHARD HH2551U-series, FUJIHARD HH2561U-series, FUJIHARD HH2570U-series data was submitted by Fujikura Kasei

(Coating information continued on the next page)

Information on Mitsubishi Rayon Acryking F-328, Acryking K-101, Acryking K-103, Acryking PH-220, Acryking PH-328, Acryking PH-700, and Acryking PH-710 may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

6-41, Konan 1-Chome, Minato-Ku  
Tokyo 108-8506, Japan  
www.mrc.co.jp

NOTE: Acryking K-101 is NOT suitable for use with or in front of a reflex reflector  
NOTE: Acryking PH-710 test data was submitted by Mitsubishi Rayon  
NOTE: Acryking PH-710 was tested on clear AL-2447 only

Information on LHP100/LHC100, SHP300/SHC3000, SHP401/AS4000, SHP401/SHC4002, SHP470/AS4700, PHC587, PHC 587C, UVHC3000, UVHC3000K, UVHC3000K1 and UVHC3000K-Z hard coats may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 www.momentive.com
---	---

NOTE: Momentive Performance Materials Inc. SHP3000/SHC3000 is NOT suitable for use with or in front of a reflex reflector

NOTE: UVHC3000K test data submitted by Momentive Performance Materials, Inc.  
NOTE: UVHC3000K1, UVHC3000K-Z, PHC 587C submitted by Momentive Performance Materials Inc.

Information on LS123 coating hard coats may be obtained by writing to the following address:

NB Coatings, Inc.  
North American Headquarters  
2701 E. 170th Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>

Information on Red Spot UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coatings may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
www.redspot.com

NOTE: All UVT test data submitted by Red Spot.

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on ACRIPLEX 100PSR/100SR hard coat may be obtained by writing to the following address:

Röhm GmbH & Co. KG  
Krischenalle  
64293 Darmstadt, Germany  
www.Röhm.com

Information on Permaclear IV and V88VC31 coatings may be obtained by writing to the following address:

Sherwin-Williams Automotive Finishes Corp.  
388 Robins Drive  
Troy, MI 48083  
www.sherwin-automotive.com

Information on SH-41 and SH-50 hard coats may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153, Japan  
www.stanley.co.jp

---

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Bayer MaterialScience LLC (America) www.bayermaterialsciencenafta.com		HIGH-HEAT	550042	Clear Q
		POLYCARBONATE	551022	Clear Q
	APEC 1603		550674	Clear Q
	APEC 1703		350335	Red Q
	APEC 1803		350340	Red Q
	(coated)		250196	Yellow Q
			250322	Yellow Q
			250339	Yellow Q
			256866	Yellow Q

Coated Bayer MaterialScience LLC (America) Apec plastics may only be treated with the following acceptable coatings listed below when applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101, Acryking PH-220, Acryking PH-328: See Mitsubishi Rayon Co., Ltd.

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3: See Fujikura Kasei Co., Ltd.

LS123: See NB Coatings, Inc.

PHC587C: See Momentive Performance Materials Inc.

SH-41: See Stanley Electric

UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7 and UVT610V8: See Red Spot

UVHC3000, UVHC3000K1, UVHC3000K-Z: See Momentive Performance Materials Inc.

V88VC31: See Sherwin Williams

#### **Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3 coatings may be obtained by writing:

Fujikura Kasei Co., Ltd.  
6-15 Shibakeon 2-Chome Minato-Ku  
Tokyo, 105-0011, Japan  
www.fkkasei.co.jp

NOTE: FUJIHARD HH2551U series is only suitable for use on APEC 1803

NOTE: FUJIHARD HH2551U series data was submitted by Fujikura Kasei

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on Acryking F-328, Acryking K-101, Acryking PH-220, and Acryking PH-328 coatings may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-chome,  
Minato-ku, Tokyo 108-8506  
Japan  
www.mrc.co.jp

NOTE: Acryking K-101 is NOT suitable for use with or in front of a reflex reflector

Information on UVHC3000, UVHC3000K1, UVHC3000K-Z and PHC587C hard coat may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 www.momentive.com
---	---

NOTE: UVHC3000 is only acceptable for use on Apec 1603

NOTE: UVHC3000K1, UVHC3000K-Z and PHC587C only for use on APEC 1803

NOTE: UVHC3000K1, UVHC3000K-Z and PHC587C data submitted by Momentive Performance Materials Inc.

Information on LS123 coating hard coat may be obtained by writing to the following address:

NB Coatings, Inc.  
North American Headquarters  
2701 E. 170th Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>  
1-800-323-3224

Information on Red Spot UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7 and UVT610V8 coatings may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
www.redspot.com

NOTE: UVT610V tested on clear APEC 1803 only

NOTE: UVT200 tested on clear samples only.

NOTE: All UVT test data submitted by Red Spot.

Information on V88VC31 coating may be obtained by writing to the following address:

Sherwin-Williams Automotive Finishes Corp.  
388 Robins Drive  
Troy, MI 48083  
www.sherwin-automotive.com

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

(Coating information continued on the next page)

Information on SH-41 hard coat may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

NOTE: Stanley SH-41 is only acceptable for use on Apec 1803

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Bayer MaterialScience LLC (America)		POLYCARBONATE	550012	Clear #
www.bayermaterialsciencenafta.com			550396	Clear #
	(MAKROLON AL2247 PROTECTED APPLICATIONS ONLY)		550660	Clear #
	MAKROLON AL2447		550674	Clear #
	MAKROLON AL2447 MAS165		551066	Clear #
	MAKROLON AL2647 MAS331		551067	Clear #
	MAKROLON AL2647		551068	Clear #
	MAKROLON AL2847		551069	Clear #
	MAKROLON AL3147		551070	Clear #
	MAKROLON LED2045 Color 000000 Protected Applications Only		551104	Clear #
	MAKROLON LED2245 Color 000000 Protected Applications Only		357866	Red #
	(coated or uncoated)		357867	Red #
			357868	Red #
			357869	Red #
			357915	Red #
			250210	Yellow #
			256811	Yellow #
			256847	Yellow #
			256858	Yellow #
			256861	Yellow #
			256866	Yellow #
			256867	Yellow #
			256868	Yellow #
			256869	Yellow #
			256894	Yellow #
			256896	Yellow #
			256908	Yellow #
			256909	Yellow #
			250200	Yellow #
			558889	Blue #
			558920	Blue #
			752723	Gray #
			752960	Gray #
			752969	Gray #
			752970	Gray #

Coated Bayer MaterialScience LLC (America) Makrolon AL plastics may only be treated with the following acceptable coatings applied to the molded lens:

Note: Color 550674 is available on AL2647 only

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101, Acryking K-103, Acryking PH-220, Acryking PH-328, Acryking PH-700 and Acryking PH-710: See Mitsubishi Rayon Co., Ltd.

ACRIPLEX 100PSR/100SR hard coats: See RöhM GmbH & Co. KG

FUJIHARD 2540U, FUJIHARD 2540U-1, FUJIHARD 2540U-2: See Fujikura Kasei Co., Ltd.

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
	FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3: See Fujikura Kasei Co., Ltd.			
	FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9: See Fujikura Kasei Co., Ltd.			
	FUJIHARD 2570U, FUJIHARD 2570U-1, FUJIHARD 2570U-2: See Fujikura Kasei Co., Ltd.			
	LHP100/LHC100: See Momentive Performance Materials Inc.			
	LS123: See NB Coatings, Inc.			
	Permaclear IV: See Sherwin Williams			
	PHC587 and PHC587C hard coat: See Momentive Performance Materials, Inc.			
	SHP300/SHC3000, SHP401/AS4000, SHP401/SHC4002, SHP470/AS4700: Momentive Performance Materials Inc.			
	SH-41 and SH-50: See Stanley Electric Co., Ltd.			
	UVHC3000, UVHC3000K, UVHC3000K1, UVHC3000K-Z: See Momentive Performance Materials Inc.			
	UVT200V1, UVT200V2, UVT200V3 and UVT200V5: See Red Spot			
	UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8: See Red Spot			
	V88VC31: See Sherwin Williams			

### **Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD 2540U, FUJIHARD 2540U-1, FUJIHARD 2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD 2570U, FUJIHARD 2570U-1, FUJIHARD 2570U-2 coatings may be obtained by writing:

Fujikura Kasei Co., Ltd.  
6-15 Shibakeon 2-Chome Minato-Ku  
Tokyo, 105-0011, Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

NOTE: FUJIHARD HH2540U-series, FUJIHARD HH2551U-series, FUJIHARD HH2561U-series, FUJIHARD HH2570U-series is only for use on clear MAKROLON AL2447 and MAKROLON 2647

NOTE: FUJIHARD HH2541U-series, FUJIHARD HH2551U-series, FUJIHARD HH2561U-series, FUJIHARD HH2570U-series data was submitted by Fujikura Kasei

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on KUV-1000 coatings may be obtained by writing:

KCC Corporation  
 83 Mabook-Dong, Giheung-Gu, Yongin-Si  
 Gyunggi-Do, South Korea  
[www.kccworld.co.kr](http://www.kccworld.co.kr)

NOTE: KUV-1000 was tested on 6.4mm thick AL-2447 only  
 NOTE: Information on KUV-100 was submitted by KCC Corporation

Information on Mitsubishi Rayon Acryking F-328, Acryking K-101, Acryking K-103, Acryking PH-220, Acryking PH-328, Acryking PH-700, and Acryking PH-710 may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
 6-41, Konan 1-Chome, Minato-Ku  
 Tokyo 108-8506, Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

NOTE: Acryking K-101 is NOT suitable for use with or in front of a reflex reflector  
 NOTE: Acryking PH-710 test data was submitted by Mitsubishi Rayon  
 NOTE: Acryking PH-710 was tested on clear AL-2447 only

Information on LHP100/LHC100, SHP300/SHC3000, SHP401/AS4000, SHP401/SHC4002, SHP470/AS4700, PHC587, PHC587C, UVHC3000, UVHC3000K, UVHC3000K1 and UVHC3000K-Z and hard coats may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 <a href="http://www.momentive.com">www.momentive.com</a>
---	--

NOTE: Momentive Performance Materials Inc. SHP3000/SHC3000 is NOT suitable for use with or in front of a reflex reflector  
 NOTE: UVHC3000K test data submitted by Momentive Performance Materials, Inc.  
 NOTE: UVHC3000K1, UVHC3000K-Z and PHC587C test data submitted by Momentive Performance Materials Inc.

Information on LS123 coating hard coat may be obtained by writing to the following address:

NB Coatings, Inc.  
 North American Headquarters  
 2701 E. 170th Street  
 Lansing, IL 60438  
<http://www.nbcoatings.com/>

(Coating information continued on the next page)

<b><u>MFR.</u></b>	<b><u>TRADE NAME AND FLOW FORMULATION</u></b>	<b><u>TYPE OF RESIN</u></b>	<b><u>NUMBER</u></b>	<b><u>COLOR</u></b>
--------------------	---	-----------------------------	----------------------	---------------------

Information on Red Spot UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coatings may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

NOTE: All UVT test data submitted by Red Spot.

Information on ACRIPLEX 100PSR/100SR hard coat may be obtained by writing to the following address:

RöhM GmbH & Co. KG  
Krischenalle  
64293 Darmstadt, Germany  
[www.Röhm.com](http://www.Röhm.com)

Information on Permaclear IV and V88VC31 coatings may be obtained by writing to the following address:

Sherwin-Williams Automotive Finishes Corp.  
388 Robins Drive  
Troy, MI 48083  
[www.sherwin-automotive.com](http://www.sherwin-automotive.com)

Information on SH-41 and SH-50 hard coats may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Bayer MaterialScience Ltd. (Asia Pacific) www.bayermaterialscience.com	APEC 1603	HIGH-HEAT POLYCARBONATE	550042	Clear Q
	APEC 1703		551022	Clear Q
	APEC 1803		550674	Clear Q
(coated)			350335	Red Q
			350340	Red Q
			250196	Yellow Q
			250322	Yellow Q
			250339	Yellow Q
			256866	Yellow Q

Coated Bayer MaterialScience Ltd. (Asia Pacific) Apec plastics may only be treated with the following acceptable coatings applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101, Acryking PH-220, Acryking PH-328: See Mitsubishi Rayon Co., Ltd.

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3: See Fujikura Kasei Co., Ltd.

LS123: See NB Coatings, Inc.

PHC587C: See Momentive Performance Materials Inc.

SH-41: See Stanley Electric Co., Ltd.

V88VC31: See Sherwin Williams

UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7 and UVT610V8: See Red Spot

UVHC3000, UVHC3000K1, and UVHC3000K-Z: See Momentive Performance Materials Inc.

#### **Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3 coatings may be obtained by writing:

Fujikura Kasei Co., Ltd.  
6-15 Shibakeon 2-Chome Minato-Ku  
Tokyo, 105-0011, Japan  
www.fkkasei.co.jp

NOTE: FUJIHARD HH2551U series is only suitable for use on APEC 1803

NOTE: FUJIHARD HH2551U series data was submitted by Fujikura Kasei

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on Acryking F-328, Acryking K-101, Acryking PH-220, and Acryking PH-328 coatings may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-chome,  
Minato-ku, Tokyo 108-8506  
Japan  
www.mrc.co.jp

NOTE: Acryking K-101 is NOT suitable for use with or in front of a reflex reflector

Information on PHC587C, UVHC3000, UVHC3000K1, and UVHC3000K-Z hard coat may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 www.momentive.com
---	---

NOTE: UVHC3000 is only acceptable for use on Apec 1603

NOTE: PHC578C, UVHC3000K1, and UVHC3000K-Z is only acceptable for use on Apec 1703 and Apec 1803

NOTE: PHC578C, UVHC3000K1, and UVHC3000K-Z data is submitted via Momentive Performance Materials

Information on LS123 coating hard coat may be obtained by writing to the following address:

NB Coatings, Inc.  
North American Headquarters  
2701 E. 170th Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>

Information on Red Spot UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7 and UVT610V8 coatings may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
www.redspot.com

NOTE: UVT200 tested on clear samples only.

NOTE: UVT610V tested on clear APEC 1803 only.

NOTE: All UVT test data submitted by Red Spot.

Information on V88VC31 coating may be obtained by writing to the following address:

Sherwin-Williams Automotive Finishes Corp.  
388 Robins Drive  
Troy, MI 48083  
www.sherwin-automotive.com

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on SH-41 hard coat may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

NOTE: Stanley SH-41 is only acceptable for use on Apec 1803

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Bayer MaterialScience Ltd. (Asia Pacific)		POLYCARBONATE	550012	Clear #
www.bayermaterialscience.com			550660	Clear #
	MAKROLON AL2447		550674	Clear #
	MAKROLON AL2447 MAS165		551066	Clear #
	MAKROLON AL2647 MAS331		551067	Clear #
	MAKROLON AL2647		551068	Clear #
	MAKROLON LED2045 Color 000000 Protected Applications Only		551069	Clear #
	MAKROLON LED2245 Color 000000 Protected Applications Only		551070	Clear #
	(coated or uncoated)		550396	Clear #
			551104	Clear #
			357866	Red #
			357867	Red #
			357868	Red #
			357869	Red #
			357915	Red #
			250210	Yellow #
			256811	Yellow #
			256847	Yellow #
			256858	Yellow #
			256861	Yellow #
			256866	Yellow #
			256867	Yellow #
			256868	Yellow #
			256869	Yellow #
			256894	Yellow #
			256896	Yellow #
			256908	Yellow #
			256909	Yellow #
			250200	Yellow #
			558889	Blue #
			558920	Blue #
			752723	Gray #
			752960	Gray #
			752969	Gray #
			752970	Gray #

Coated Bayer MaterialScience Ltd. (Asia Pacific) Makrolon AL plastics may only be treated with the following acceptable coatings applied to the molded lens.

Note: Color 550674 is available on AL2647 only

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

ACRIPLEX 100PSR/100SR: See Röhm GmbH & Co. KG

Acryking F-328, Acryking K-101, Acryking K-103, Acryking PH-220, Acryking PH-328, Acryking PH-700 and Acryking PH-710: See Mitsubishi Rayon Co., Ltd.

FUJIHARD 2540U, FUJIHARD 2540U-1, FUJIHARD 2540U-2: See Fujikura Kasei Co., Ltd.

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3: See Fujikura Kasei Co., Ltd.

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
	FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9: See Fujikura Kasei Co., Ltd.			
	FUJIHARD 2570U, FUJIHARD 2570U-1, FUJIHARD 2570U-2: See Fujikura Kasei Co., Ltd.			
	KUV-1000: See KCC Corporation			
	LHP100/LHC100: See Momentive Performance Materials Inc.			
	LS123: See NB Coatings Inc.			
	Permaclear IV: See Sherwin Williams			
	PHC587 and PHC587C: See Momentive Performance Materials Inc			
	SHP300/SHC3000, SHP401/AS4000, SHP401/SHC4002, SHP470/AS4700: See Momentive Performance Materials			
	UVHC3000, UVHC3000K, UVHC3000K1 and UVHC3000K-Z: See Momentive Performance Materials			
	UVT200V1, UVT200V2, UVT200V3 and UVT200V5: See Red Spot			
	UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 hard coats: See Red Spot			
	V88VC31: See Sherwin Williams			

### Coating Manufacturer in Alphabetical Order

Information on FUJIHARD 2540U, FUJIHARD 2540U-1, FUJIHARD 2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD 2570U, FUJIHARD 2570U-1, FUJIHARD 2570U-2 coatings may be obtained by writing:

Fujikura Kasei Co., Ltd.  
6-15 Shibakeon 2-Chome Minato-Ku  
Tokyo, 105-0011, Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

NOTE: FUJIHARD HH2540U-series, FUJIHARD HH2551U-series, FUJIHARD HH2561U-series, FUJIHARD HH2570U-series is only for use on clear MAKROLON AL2447 and MAKROLON 2647

NOTE: FUJIHARD HH2541U-series, FUJIHARD HH2551U-series, FUJIHARD HH2561U-series, FUJIHARD HH2570U-series data was submitted by Fujikura Kasei

(Coating information continued on the next page)

Information on KUV-1000 coatings may be obtained by writing:

KCC Corporation  
83 Mabook-Dong, Giheung-Gu, Yongin-Si

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Gyeonggi-Do, South Korea  
www.kccworld.co.kr.

NOTE: KUV-1000 was tested on 6.4mm thick AL-2447 only  
NOTE: Information on KUV-100 was submitted by KCC Corporation

Information on Mitsubishi Rayon Acryking F-328, Acryking K-101, Acryking K-103, Acryking PH-220, Acryking PH-328, Acryking PH-700, and Acryking PH-710 may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-Chome, Minato-Ku  
Tokyo 108-8506, Japan  
www.mrc.co.jp

NOTE: Acryking K-101 is NOT suitable for use with or in front of a reflex reflector  
NOTE: Acryking PH-710 test data was submitted by Mitsubishi Rayon  
NOTE: Acryking PH-710 was tested on clear AL-2447 only

Information on LHP100/LHC100, SHP300/SHC3000, SHP401/AS4000, SHP401/SHC4002, SHP470/AS4700, PHC587, PHC587C, UVHC3000, UVHC3000K, UVHC3000K1, and UVHC3000K-Z hard coats may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 www.momentive.com
---	---

NOTE: Momentive Performance Materials Inc. SHP3000/SHC3000 is NOT suitable for use with or in front of a reflex reflector

NOTE: UVHC3000K, UVHC3000K1, UVHC3000K-Z and PHC587C test data submitted by Momentive Performance Materials, Inc.

Information on LS123 coating hard coats may be obtained by writing to the following address:

NB Coatings Inc.  
2701 East 170TH Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on Red Spot UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coatings may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

NOTE: All UVT test data submitted by Red Spot.

Information on ACRIPLEX 100PSR/100SR hard coat may be obtained by writing to the following address:

RöhM GmbH & Co. KG  
Krischenalle  
64293 Darmstadt, Germany  
[www.Röhm.com](http://www.Röhm.com)

Information on Permaclear IV and V88VC31 coatings may be obtained by writing to the following address:

Sherwin-Williams Automotive Finishes Corp.  
388 Robins Drive  
Troy, MI 48083  
[www.sherwin-automotive.com](http://www.sherwin-automotive.com)

Information on SH-41 and SH-50 hard coats may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Chimei Corporation  <a href="http://www.chimeicorp.com.tw">http://www.chimeicorp.com.tw</a>	ACRYREX CM-205	POLYMETHYL METHACRYLATE	N-000	Clear
			R-103	Red
			R-104	Red
			A-202	Yellow
			A-203	Yellow
Chimei Corporation Zhenjiang China  <a href="http://www.chimeicorp.com.cn">www.chimeicorp.com.cn</a>	ACRYREX CM-205	POLYMETHYL METHACRYLATE	N-000	Clear
			R-103	Red
			R-104	Red
			A-202	Yellow
			A-203	Yellow
Chimei Corporation  <a href="http://www.chimeicorp.com.tw">http://www.chimeicorp.com.tw</a>	WONDERLITE PC-110L	POLYCARBONATE	N-102	Clear \$
			N-102H	Clear \$
			N-102K	Clear \$
			N-102U	Clear \$
			N-103	Clear \$
			N-103H	Clear \$
			N-103K	Clear \$
			N-103U	Clear \$
			N-104	Clear \$
			N-104H	Clear \$
			N-104K	Clear \$
			N-104U	Clear \$

Coated Chimei Corporation plastics may only be used when treated with the following acceptable coatings applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking K-101: See Mitsubishi Rayon Co., Ltd.

FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7, FUJIHARD HH3035U, FUJIHARD HH3035U-1, FUJIHARD HH3035U-2, FUJIHARD HH3035U-3: See Fujikura Kasei Co., Ltd.

UVHC3000: See Momentive Performance Materials Inc.

#### **Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7, FUJIHARD HH3035U, FUJIHARD HH3035U-1, FUJIHARD HH3035U-2, FUJIHARD HH3035U-3, coating may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on Mitsubishi Rayon Acryking K-101 coating may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-chome,  
Minato-ku, Tokyo 108-8506  
Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

Information on UVHC3000 hard coat may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 <a href="http://www.momentive.com">www.momentive.com</a>
---	--

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Daesan MMA Corp. www.dmma.co.kr	ACRYPET VH	POLYMETHYL METHACRYLATE	001	Clear

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Daicel	CEVIAN N 080W	STYRENE/	01042	Red
Polymer Ltd.	CEVIAN N 085W	ACRYLONITRILE	1Z026	Red
			1Z027	Red
www.daicel.co.jp			2Z010	Yellow
			2Z011	Yellow
			2Z012	Yellow
			2Z013	Yellow
			20385	Yellow
			20388	Yellow

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Diapolyacrylate Co., Ltd. Email: diap@anet.net.th	ACRYPET MD	POLYMETHYL METHACRYLATE	001	Clear
			101	Red
			114	Red
			203	Yellow
			206	Yellow
Diapolyacrylate Co., Ltd. Email: diap@anet.net.th	ACRYPET V	POLYMETHYL METHACRYLATE	011	Clear
			101	Red
			114	Red
			131	Red
			146	Red
			147	Red
			148	Red
			149	Red
			160	Red
			203	Yellow
			206	Yellow
			236	Yellow
			283	Yellow
			284	Yellow
			285	Yellow
			286	Yellow
			287	Yellow
			288	Yellow
			291	Yellow
			292	Yellow
Diapolyacrylate Co., Ltd. diap@anet.net.th	ACRYPET VE ACRYPET VES ACRYPET VH ACRYPET VH4 ACRYPET VHM ACRYPET VHS SHINKOLITE P VE SHINKOLITE P VES SHINKOLITE P VH SHINKOLITE P VHS	POLYMETHYL METHACRYLATE	001	Clear
			361	Clear
			362	Clear
			363	Clear
			364	Clear
			PYR5406	Clear
			007	White
			5204	White
			PR5556	White
			5470	White
			53260	White
			54225	White
			54260	White
			55475	White
			55480	White
			55485	White
			55580	White
			55670	White
			57163	White
55780	White			
58154	White			
101	Red			
111	Red			
112	Red			

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Diapolyacrylate Co., Ltd. diap@anet.net.th	ACRYPET VE	POLYMETHYL METHACRYLATE	113	Red
	ACRYPET VES		116	Red
	ACRYPET VH		117	Red
	ACRYPET VH4		120	Red
	ACRYPET VHM		121	Red
	ACRYPET VHS		128	Red
	SHINKOLITE P VE		129	Red
	SHINKOLITE P VES		141	Red
	SHINKOLITE P VH		142	Red
	SHINKOLITE P VHS		143	Red
			151	Red
			1007	Red
			5101	Red
			5101B	Red
			5111	Red
			5112	Red
			5113	Red
			5114	Red
			5115	Red
			5116	Red
			5117	Red
			5118	Red
			5119	Red
			5121	Red
			5131	Red
			5141	Red
			5142	Red
			5143	Red
			5151	Red
			5276	Red
			5296	Red
			5386	Red
			5456	Red
	203	Yellow		
	209	Yellow		
	252	Yellow		
	253	Yellow		
	254	Yellow		
	255	Yellow		
	256	Yellow		
	257	Yellow		
	258	Yellow		
	259	Yellow		
	262	Yellow		
	263	Yellow		
	264	Yellow		
	265	Yellow		
	266	Yellow		
	267	Yellow		
	270	Yellow		
	290	Yellow		
	2001	Yellow		
	5203	Yellow		
	5206	Yellow		
	5213	Yellow		
	5223	Yellow		

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Diapolyacrylate Co., Ltd. diap@anet.net.th	ACRYPET VE	POLYMETHYL METHACRYLATE	5233	Yellow
	ACRYPET VES		5243	Yellow
	ACRYPET VH		5253	Yellow
	ACRYPET VH4		5256	Yellow
	ACRYPET VHM		5263	Yellow
	ACRYPET VHS		5266	Yellow
	SHINKOLITE P VE		5273	Yellow
	SHINKOLITE P VES		5283	Yellow
	SHINKOLITE P VH		5293	Yellow
	SHINKOLITE P VHS		5303	Yellow
			5313	Yellow
			5323	Yellow
			5333	Yellow
			5343	Yellow
			5353	Yellow
			5363	Yellow
			5373	Yellow
			5383	Yellow
			5393	Yellow
			5403	Yellow
			5413	Yellow
			5423	Yellow
			531	Gray
			533	Gray
			541	Gray
			53105	Gray
			53110	Gray
	53120	Gray		
	53130	Gray		
	53137	Gray		
	53140	Gray		
	53150	Gray		
	53155	Gray		
	53160	Gray		
	53165	Gray		
	53168	Gray		
	53170	Gray		
	53173	Gray		
	53175	Gray		
	53178	Gray		
	53180	Gray		
	53183	Gray		
	53185	Gray		
	53187	Gray		
	53190	Gray		
	54107	Gray		
	54110	Gray		
	54112	Gray		
	54115	Gray		
	54118	Gray		
	54120	Gray		
	54130	Gray		
	54132	Gray		
	54133	Gray		
	54135	Gray		
	54140	Gray		

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Diapolyacrylate Co., Ltd. diap@anet.net.th	ACRYPET VE	POLYMETHYL METHACRYLATE	54145	Gray
	ACRYPETVES		54155	Gray
	ACRYPET VH	54160	Gray	
	ACRYPET VH4	54165	Gray	
	ACRYPET VHM	54170	Gray	
	ACRYPET VHS			
	SHINKOLITE P VE			
	SHINKOLITE P VES			
	SHINKOLITE P VH			
SHINKOLITE P VHS				

Coated Diapolyacrylate plastics may only be treated with the following acceptable coatings applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

FUJIHARD HH3012U-6, FUJIHARD HH3012U-7, FUJIHARD HH3012U-8, FUJIHARD HH3012U-9, and FUJIHARD HH3035U, FUJIHARD HH3035U-1, FUJIHARD HH3035U-2, FUJIHARD HH3035U-3,: See Fujikura Kasei Co Ltd

#### **Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD HH3012U-6, FUJIHARD HH3012U-7, FUJIHARD HH3012U-8, FUJIHARD HH3012U-9, and FUJIHARD HH3035U, FUJIHARD HH3035U-1, FUJIHARD HH3035U-2, FUJIHARD HH3035U-3, coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

NOTE: FUJIHARD HH3012U-6, FUJIHARD HH3012U-7, FUJIHARD HH3012U-8, FUJIHARD HH3012U-9, and FUJIHARD HH3035U, FUJIHARD HH3035U-1, FUJIHARD HH3035U-2, FUJIHARD HH3035U-3, for use only on Acrypet VH grades.

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Evonik Cyro LLC	PLEXIGLAS	POLYMETHYL	000	Clear
Evonik Degussa China	ACRYLITE	METHACRYLATE	001	Clear
Evonik Röhm GmbH	ACRYLITE PLUS		99530	Clear
	ROHAGLAS		99661	Clear
www.cyro.com	ROHAGUM		3V408(98186)	Clear
www.evonik.com	7N		543A	Neutral
www.plexiglas.de	7M		7V403(551)	Neutral
	7H		870B	Neutral
	H-15		970	Red
	8N		33701(993)	Red
	8H		33691 (9103)	Red
	hw55		33460 (9117)	Red
	G8		3V403(973)	Red
	PLEX 8805F = PLEXIMID 8805 =		33232	Red
	ACRYMID 815 = ACRYMID TT50		33440	Red
	PLEXIMID 8813 = ACRYMID <b>813</b>		33450	Red
	PLEX 8846F		33470	Red
	PLEX 8854F		33711	Red
	zk3BR		33721	Red
	zk4BR		33740(98151)	Red
	zk4HC		33780 (901)	Red
	zk5BR		33661(98150)	Red
	zk5HT		33681(98190)	Red
	ZK-6X		3V125(98181)	Red
	zk6BR		3V126	Red
	zk6HT		3V136(98182)	Red
	zk20		3V137(98188)	Red
	zk30		3V401(900)	Red
	zk40		3V402(904)	Red
	ZK-MX		3V403(973)	Red
	ZK-PX		1V400(106)	Yellow
	FT15		23105(100)	Amber
			2V401(114)	Amber
			115	Amber
			23085(154)	Yellow
			13025(18137)	Yellow
			13071(177)	Yellow
			13115(18108)	Amber
			13253(18125)	Yellow
			2V404(141 & 23060)	Yellow
			23340(18109)	Amber
			23095(18131)	Amber
			23335	Amber
			75451(5102)	Gray
			77670	Gray
			7V205	Gray
			7V244	Gray
			7V265	Gray
			7V268(58246)	Grey
			7V269(58193)	Grey
			7V270	Grey
			7V271(58248)	Grey
			7V272	Gray
			7V273(58192)	Gray

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Evonik Cyro LLC	PLEXIGLAS	POLYMETHYL	7V274	Gray
Evonik Degussa China	ACRYLITE	METHACRYLATE	7V275(58210)	Gray
Evonik Röhm GmbH	ACRYLITE PLUS		3V408(98186)	Gray
	ROHAGLAS		65122	GREEN
www.cyro.com	ROHAGUM		65542	GREEN
www.evonik.com	7N			
www.plexiglas.de	7M			
	7H			
	H-15			
	8N			
	8H			
	hw55			
	G8			
	PLEX 8805F = PLEXIMID 8805 = ACRYMID <b>815</b>			
	PLEXIMID 8813 = ACRYMID <b>813</b>			
	PLEX 8846F			
	PLEX 8854F			
	zk3BR			
	zk4BR			
	zk4HC			
	zk5BR			
	zk5HT			
	ZK-6X			
	zk6BR			
	zk6HT			
	zk20			
	zk30			
	zk40			
	ZK-MX			
	ZK-PX			
	FT15			

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Formosa Idemitsu Petrochemical Corp.	TARFLON IV1900R TARFLON IV2200R (coated applications only)	POLYCARBONATE		Clear #

www.ipc.idemitsu.co.jp

Coated Formosa Idemitsu Petrochemical Corp. plastics may only be used when treated with the following acceptable coating applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

PHC587: See Momentive Performance Materials, Inc.

SH-41 and SH-50 (only IV2200R): See Stanley Electric

UVHC3000 and UVHC3000K: See Momentive Performance Materials, Inc.

UVT200V1, UVT200V2, UVT200V3 and UVT200V5: See Red Spot

UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8: See Red Spot.

#### **Coating Manufacturer in Alphabetical Order**

Information on UVHC3000, UVHC3000K and PHC587 hard coat may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 www.momentive.com
---	---

Information on Red Spot UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8, coatings may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
www.redspot.com

Information on SH-41 and SH-50 hard coats may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153, Japan  
www.stanley.co.jp

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Idemitsu Kosan Co., Ltd.	TARFLON IV1900R TARFLON IV2200R (coated applications only)	POLYCARBONATE		Clear #

[www.ipc.idemitsu.co.jp](http://www.ipc.idemitsu.co.jp)

(Formerly Idemitsu Petrochemical Co., Ltd.)

Coated Idemitsu Kosan Co., Ltd. plastics may only be used when treated with the following acceptable coating applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

PHC587: See Momentive Performance Materials, Inc.

SH-41 and SH-50 (only IV2200R): See Stanley Electric

UVHC3000 and UVHC3000K: See Momentive Performance Materials, Inc.

UVT200V1, UVT200V2, UVT200V3 and UVT200V5: See Red Spot

UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8: See Red Spot.

#### **Coating Manufacturer in Alphabetical Order**

Information on UVHC3000, UVHC3000K and PHC587 hard coat may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 <a href="http://www.momentive.com">www.momentive.com</a>
---	--

Information on Red Spot UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8, coatings may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

Information on SH-41 and SH-50 hard coats may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Idemitsu	TARFLON V1500	POLYCARBONATE	C901	Clear \$
Kosan	TARFLON V1700		C902	Clear \$
Co., Ltd.	TARFLON V1900		C903	Clear \$
	TARFLON V2200		R901	Red \$
www.ipc.idemitsu.co.jp	TARFLON V2500		R902	Red \$
	TARFLON V2700		R903	Red \$
	TARFLON V3000		R904	Red \$
	(coated or uncoated)		R905	Red \$
(formerly Idemitsu Petrochemical Co., Ltd.)			Y901	Yellow \$
			Y902	Yellow \$
			Y903	Yellow \$
			Y904	Yellow \$
			Y905	Yellow \$

Coated Idemitsu Kosan Co. Ltd. plastics may only be treated with the following acceptable coatings applied to the molded lens:

**Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking K-101: See Mitsubishi Rayon Co., Ltd.

LS123: See NB Coatings Inc.

TARFLONCOAT 101 or TARFLONCOAT 201: See Idemitsu Kosan Co., Ltd.

**Coating Manufacturer in Alphabetical Order**

Information on Tarfloncoat 101 and Tarfloncoat 201 coatings may be obtained by writing to the following address:

Idemitsu Kosan Co., Ltd.  
1-1, Marunochi 3-Chome, Chiyoda-KU  
Tokyo 100, Japan  
www.ipc.idemitsu.co.jp

Information on Mitsubishi Rayon Acryking K-101 coating may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-chome,  
Minato-ku, Tokyo 108-8506  
Japan  
www.mrc.co.jp

Information on LS123 coating may be obtained by writing to the following address:

NB Coatings Inc.  
2701 East 170TH Street  
Lansing, IL 60438  
http://www.nbcoatings.com/

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Kuraray	PARAPET HR	POLYMETHYL	1000	Clear
Co., Ltd.	PARAPET HR-F	METHACRYLATE	11095	Clear
	PARAPET HR-G		11161	Clear
www.kuraraychemical.com	PARAPET HR-H		12064	Clear
	PARAPET HR-L		12065	Clear
	PARAPET HR-LE		14146	Clear
	PARAPET HR-N		14148	Clear
	PARAPET HR-S		16569	Clear
	PARAPET HR-X		1103	Red
	PARAPET HR-Z		1104	Red
	PARAPET GR		1106	Red
	PARAPET HR-X		1111	Red
			1116	Red
			1173	Red
			1175	Red
			11008	Red
			11009	Red
			11010	Red
			11015	Red
			11023	Red
			11025	Red
			11028	Red
			11029	Red
			11030	Red
			11031	Red
			11035	Red
			11036	Red
			11037	Red
			11038	Red
			11039	Red
			11040	Red
			11041	Red
			11042	Red
			11046	Red
			11048	Red
			11050	Red
			11051	Red
			11052	Red
			11053	Red
			11054	Red
			11055	Red
			11056	Red
			11057	Red
			11072	Red
			11083	Red
			11107	Red
			11120	Red
			11121	Red
			11152	Red
			11153	Red
			11165	Red
			11175	Red
			11178	Red
			11180	Red

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>	
Kuraray Co., Ltd.	PARAPET HR	POLYMETHYL METHACRYLATE	11181	Red	
	PARAPET HR-F		11182	Red	
www.kuraraychemical.com	PARAPET HR-G		11188	Red	
	PARAPET HR-H		11196	Red	
	PARAPET HR-L		11194	Red	
	PARAPET HR-LE		1207	Yellow	
	PARAPET HR-N		1208	Yellow	
	PARAPET HR-S		1237	Yellow	
	PARAPET HR-X		1240	Yellow	
	PARAPET HR-Z		1241	Yellow	
	PARAPET GR		1242	Yellow	
	PARAPET HR-X		1244	Yellow	
				12008	Yellow
				12013	Yellow
				12019	Yellow
				12021	Yellow
				12062	Yellow
			12067	Yellow	
			12068	Yellow	
			17020	Yellow	
			17021	Yellow	
			17023	Yellow	
			17040	Yellow	
			17047	Yellow	
			17048	Yellow	
			17049	Yellow	
			17050	Yellow	
			17051	Yellow	
			17052	Yellow	
			17056	Yellow	
			17062	Yellow	
			17066	Yellow	
			17071	Yellow	
			17072	Yellow	
			17073	Yellow	
			17074	Yellow	
			17075	Yellow	
			17086	Yellow	
			17090	Yellow	
			17099	Yellow	
			17101	Yellow	
			17105	Yellow	
			17116	Yellow	
			17124	Yellow	
			17185	Yellow	
			17191	Yellow	
			17192	Yellow	
			17209	Yellow	
			10247	Gray	
			11161	Gray	
			11176	Gray	
			11198	Gray	
			12048	Gray	
			16072	Gray	
			16073	Gray	
			16074	Gray	

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Kuraray Co., Ltd.  www.kuraraychemical.com	PARAPET HR	POLYMETHYL METHACRYLATE	16081	Gray
	PARAPET HR-F		16133	Gray
	PARAPET HR-G		16333	Gray
	PARAPET HR-H		16365	Gray
	PARAPET HR-L		16384	Gray
	PARAPET HR-LE		16395	Gray
	PARAPET HR-N		16396	Gray
	PARAPET HR-S		16421	Gray
	PARAPET HR-X		16422	Gray
	PARAPET HR-Z		16423	Gray
	PARAPET GR		16424	Gray
	PARAPET HR-X		16425	Gray
			16426	Gray
			16427	Gray
			16428	Gray
			16429	Gray
			16430	Gray
			16431	Gray
			16432	Gray
			16433	Gray
			16434	Gray
			16435	Gray
			16456	Gray
	16457	Gray		
	16458	Gray		
	16459	Gray		
	16460	Gray		
	16536	Gray		
	16559	Gray		
	16563	Gray		
	16565	Gray		
	16570	Gray		
	16574	Gray		
	17172	Gray		
	16071	Brown		
	17063	Brown		
	17079	Brown		
	17212	Brown		
	17213	Brown		
<hr/>				
Kuraray Co., Ltd.  www.kuraraychemical.com	PARAPET EH	POLYMETHYL METHACRYLATE	1000	Clear
	PARAPET GH			
	PARAPET HA			
	PARAPET SH			
<hr/>				
Kuraray Co., Ltd.  www.kuraraychemical.com	PARAPET SH-N	POLYMETHYL METHACRYLATE	1000	Clear
			11099	Red
			11100	Red
			12042	Yellow
		17174	Yellow	
		16437	Grey	
<hr/> <hr/>				

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
LG Chem, Ltd. www.lgchem.com	LUPOY PC 1303AH-10	POLYCARBONATE	W0990T	White \$
	LUPOY PC 1303AH-15		W0991T	White \$
	LUPOY PC 1303AH-22		W0992T	White \$
	LUPOY PC 1303AH-30		W0993T	White \$
	(coated or uncoated)		R0758T	Red \$
			Y0182T	Yellow \$

(formerly LG-Polycarbonate Ltd.)

Coated LG Polycarbonate Ltd. plastics may only be treated with the following acceptable coatings applied to the molded lens:

**Coating in Alphabetical Order and Corresponding Manufacturer**

FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7, FUJIHARD HH3035U-3, and FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3: See Fujikura Kasei Co., Ltd.

LS123: See NB Coatings Inc.

PHC587C: See Momentive Performance Materials Inc.

SHP401/AS4000 hard coat: See Momentive Performance Materials Inc.

UVHC3000, UVHC3000K1 UVHC3000K-Z: See Momentive Performance Materials Inc.

**Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7, FUJIHARD HH3035U-3, and FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shinbakeon 2-Chome  
Minato-Ku Tokyo, 105-0011  
Japan  
www.fkkasei.co.jp

Information on SHP401/AS4000, UVHC3000, UVHC3000K1, UVHC3000K-Z and PHC587C hard coats may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 www.momentive.com
---	---

Information on LS123 coating may be obtained by writing to the following address:

NB Coatings Inc.  
2701 East 170TH Street  
Lansing, IL 60438  
http://www.nbcoatings.com/

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
LG Chem, Ltd.	EG-930	POLYMETHYL		Clear
	EH-910	METHACRYLATE	4001	Red
www.lgchem.com	IH830A		4002	Red
	IH830C		4006	Red
	IH830		4009	Red
	IH830CA		40010	Red
	EG920		40020	Red
	IH830HR		40030	Red
	HI835MS		40040	Red
	HI835H		40050	Red
	HP202		40060	Red
			40070	Red
			2001	Yellow
Formerly LGMMA Corp.				20010 Yellow
			20020	Yellow
			20030	Yellow
			20040	Yellow
			30010	Yellow
			30040	Yellow
			8001	Grey

NOTE: IG-840 is now called as IH-830A

NOTE: IH830CA, EG920, IH830HR, HI835MS, HI835H, HP202 only comply with FMVSS 108 in 2.0mm through 3.2mm thicknesses.

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Lucite	DIAKON CLG902	POLYMETHYL	001	Clear
International	DIAKON CLG902L	METHACRYLATE	006	Clear
(U.K.)	DIAKON CLG904		007	Clear
	DIAKON CMG314		011	Clear
www.lucitesolutions.com	DIAKON CMG314N		0P11	Clear
	DIAKON CMG314R		9047	Neutral
	DIAKON CMG314V		9051	Neutral
	DIAKON CMG334V		9184	Neutral
	DIAKON CMH450		9195	Neutral
	DIAKON CMH454L		9197	Neutral
	DIAKON CMH454V		9198	Neutral
	DIAKON HS3120		405	Red
	DIAKON MG114		413	Red
	DIAKON MH254		415	Red
	DIAKON ST10H8L		416	Red
	DIAKON ST15G8		417	Red
	DIAKON ST15H8L		418	Red
	DIAKON ST20G8		419	Red
	DIAKON ST20H8L		421	Red
	DIAKON ST25G7		422	Red
	DIAKON ST25G8		425	Red
	DIAKON ST25H8L		428	Red
	DIAKON ST35G7		433	Red
	DIAKON ST35G8		435	Red
	DIAKON ST35H8L		436	Red
	DIAKON TD5H05L		437	Red
	DIAKON TD5H10L		438	Red
	DIAKON TD5H15L		439	Red
	DIAKON TD5H25L		440	Red
	DIAKON TD5H42L		442	Red
	DIAKON TD510		4088	Red
	DIAKON TD515		4114	Red
	DIAKON TD525		4132	Red
	DIAKON TD542		4162	Red
	DIAKON TD825		4163	Red
	DIAKON TD842		4169	Red
			4194	Red
			4209	Red
			4222	Red
			4223	Red
			4232	Red
			4234	Red
			4235	Red
			4236	Red
			4237	Red
			4238	Red
			4239	Red
			4248	Red
			4249	Red
			4255	Red
			4256	Red
			4259	Red
			4260	Red
			4261	Red

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>	
Lucite International (U.K.)	DIAKON CLG902	POLYMETHYL METHACRYLATE	4262	Red	
	DIAKON CLG902L		4263	Red	
www.lucitesolutions.com	DIAKON CLG904		4264	Red	
	DIAKON CMG314		4265	Red	
	DIAKON CMG314N		4266	Red	
	DIAKON CMG314R		4267	Red	
	DIAKON CMG314V		4268	Red	
	DIAKON CMG334V		4269	Red	
	DIAKON CMH450		4270	Red	
	DIAKON CMH454L		4271	Red	
	DIAKON CMH454V		4272	Red	
	DIAKON HS3120		4273	Red	
	DIAKON MG114		4286	Red	
	DIAKON MH254		4P01	Red	
	DIAKON ST10H8L		310	Yellow	
	DIAKON ST15G8		311	Yellow	
	DIAKON ST20H8L		312	Yellow	
	DIAKON ST25G7		314	Yellow	
	DIAKON ST25G8		316	Yellow	
	DIAKON ST25H8L		317	Yellow	
	DIAKON ST35G7		318	Yellow	
	DIAKON ST35G8		319	Yellow	
	DIAKON ST35H8L		3064	Yellow	
	DIAKON TD5H05L		3069	Yellow	
	DIAKON TD5H10L		3071	Yellow	
	DIAKON TD5H15L		3080	Yellow	
	DIAKON TD5H25L		3081	Yellow	
	DIAKON TD5H42L		3103	Yellow	
	DIAK ON TD510		3104	Yellow	
	DIAKON TD515		3150	Yellow	
	DIAKON TD525		3151	Yellow	
	DIAKON TD542		3152	Yellow	
	DIAKON TD825		3153	Yellow	
	DIAKON TD842		3154	Yellow	
				3161	Yellow
				3162	Yellow
			3163	Yellow	
			3164	Yellow	
			3165	Yellow	
			6150	Green	
			9388	Grey	

---



---

For Lucite International (U.S.A.) Please see Plaskolite.

---



---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
MEP Europe BV	XANTAR 18 U	POLYCARBONATE	01013	Clear \$
	XANTAR 19 U		51010	Red \$
	XANTAR 22 U		51011	Red \$
	XANTAR 24 U		51012	Red \$
www.xantar.com	XANTAR 27 U		51013	Red \$
	(coated or uncoated)		51014	Red \$
			51019	Red \$
			91012	Blue \$
			91013	Blue \$
Formerly DSM Engineering Plastics			91014	Blue \$
			61004	Orange \$
			61005	Orange \$
			61006	Orange \$
			61007	Orange \$
			61008	Orange \$

Coated MEP Europe BV materials are only acceptable with the coatings listed below when properly applied to the molded lens. LS123 coating

Information on LS123 coating may be obtained by writing to the following address:

NB Coatings Inc.  
2701 East 170TH Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Mitsubishi Engineering Plastics Corp.	IUPILON ML-100	POLYCARBONATE	001	Clear #
	IUPILON ML-200		0001	Clear #
	IUPILON ML-300		R591A	Clear #
	IUPILON ML-350		R591B	Clear #
	IUPILON ML-400		R530B	Clear #
	IUPILON ML-100R		R591S	Clear #
www.m-ep.co.jp	IUPILON ML-200R		101	Red #
	IUPILON ML-300R		102	Red #
	IUPILON ML-350R		103	Red #
	IUPILON ML-400R		104	Red #
			R138J	Red #
			1001	Red #
			1002	Red #
			301	Yellow #
			3001	Yellow #

Coated Mitsubishi Engineering Plastics Corp. Iupilon plastics may only be treated with the following coatings listed below.

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101-S, Acryking PH-220, Acryking PH-328, Acryking PH-700, Acryking PH-710, Acryking PH-720, Acryking, PH-750 and Acryking PH-800: See Mitsubishi Rayon Co., Ltd.

FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2: See Fujikura Kasei

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2561U-3: See Fujikura Kasei

FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9: See Fujikura Kasei

FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2: See Fujikura Kasei

IUPILON Coat UV: See Mitsubishi Engineering Plastics Corp.

PHC587C: See Momentive Performance Materials Inc.

SH-41, SH-50: See Stanley Electric

UVHC3000, UVHC3000K, UVHC3000K1, and UVHC3000K-Z: See Momentive Performance Materials Inc.

UVT200V1, UVT200V2, UVT200V3 and UVT200V5, : See Red Spot.

UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8: See Red Spot.

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

**Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
 6-15 Shibakoen 2-Chome  
 Minato-Ku, Tokyo 105-0011  
 Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

Note: Fujihard HH2540 series, HH2551U series, HH2561 series and HH2570U series tested on ML-300 clear only

Information on IUPILON COAT UV may be obtained by writing to the following address:

Mitsubishi Engineering Plastics Corp.  
 Plastics Sales Department  
 5-2, Marunouchi 2-Chome  
 Chiyoda-KU, Tokyo, Japan  
[www.m-ep.co.jp](http://www.m-ep.co.jp)

Information on Acryking F-328, Acryking K-101-S, Acryking PH-220, Acryking PH-328, Acryking PH-700, Acryking PH-710 Acryking PH-720, Acryking PH-750 and Acryking PH-800 coatings may be obtained by writing to the following company:

Mitsubishi Rayon Co., Ltd.  
 6-41, Konan 1-chome,  
 Minato-ku, Tokyo 108-8506  
 Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

NOTE: Acryking PH-700, PH-710, PH-720, PH-750 and PH-800 were tested on ML-300 clear only

Information on PHC587C, UVHC3000, UVHC3000K, UVHC3000K1, and UVHC3000K-Z, hard coats may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 <a href="http://www.momentive.com">www.momentive.com</a>
---	--

NOTE: UVHC3000K only tested on lupilon ML 300 / ML 350

NOTE: UVHC3000 only tested on lupilon ML 350

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coating may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

NOTE: Red Spot UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 is only acceptable ML-300 and ML350

Information on Stanley Electric SH-41 and SH-50 may be obtained by writing to the following company:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153  
Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

NOTE: SH-50 may not be used in front of a reflex reflector. Material would have code \$

NOTE: SH-41 may be used be used in front of a reflex reflector. Material would have code Q

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Mitsubishi Engineering-Plastics Corporation www.m-ep.co.jp	IUPILON ML-100	POLYCARBONATE	001	Clear \$
	IUPILON ML-200		H5102	Clear \$
	IUPILON ML-300		R5RSE	Clear \$
	IUPILON ML-400		R5QTE	Clear \$
	IUPILON ML-500		R5RZE	Clear \$
	IUPILON ML-100R		R5KYH	Clear \$
	IUPILON ML-200R		R329K	Clear \$
	IUPILON ML-300R		R166J	Clear \$
	IUPILON ML-400R		H2059	Clear \$
	IUPILON ML-500R		A6067	Clear \$
	(coated or uncoated)		R525A	Clear \$
			R456J	Clear \$
			R526A	Clear \$
			T689R	Clear \$
			A6067	Clear \$
			105	Red \$
			302	Yellow \$
	501	Gray Smoke \$		
	R5YNH	Gray Smoke \$		

Coated Mitsubishi Engineering-Plastics Corp. plastics may only be treated with the following acceptable coatings applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101-S, Acryking PH-220, Acryking PH-328, Acryking PH-700, Acryking PH-710 Acryking PH-720, Acryking, PH-750 and Acryking PH-800: See Mitsubishi Rayon

FUJIHARD HH25401U, HH2540U-1, HH2540U-2: See Fujikura Kasei.

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2561U-3: See Fujikura Kasei

FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9: See Fujikura Kasei

FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2: See Fujikura Kasei

IUPILON COAT UV: See Mitsubishi Engineering Plastics Corp.

UVT200V1, UVT200V2, UVT200V3 and UVT200V5: See Red Spot.

UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8: See Red Spot.

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

**Coating Manufacturer in Alphabetical Order**

Information on:

FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2,  
 FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3,  
 FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9,  
 FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2  
 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
 6-15 Shibakoen 2-Chome  
 Minato-Ku, Tokyo 105-0011  
 Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

Note: Fujihard HH2540 series, HH2551U series, HH2561 series and HH2570U series tested on ML-300 clear only

Information on IUPILON COAT UV may be obtained by writing to the following address:

Mitsubishi Engineering Plastics Corp.  
 Plastics Sales Department  
 5-2, Marunouchi 2-Chome  
 Chiyoda-KU, Tokyo, Japan  
[www.m-ep.co.jp](http://www.m-ep.co.jp)

Information on Mitsubishi Rayon Acryking F-328, Acryking K-101-S, Acryking PH-220, Acryking PH-328, Acryking PH-700, Acryking PH-710 Acryking PH-720, Acryking, PH-750 and Acryking PH-800 may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
 6-41, Konan 1-Chome, Minato-Ku  
 Tokyo 108-8506, Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

NOTE: Acryking PH-700, PH-710, PH-720, PH-750 and PH-800 was tested on clear ML-300 only

Information on UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coating may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
 P.O. Box 418  
 Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

NOTE: Red Spot UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 is only acceptable ML-300 and ML350

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Mitsubishi Engineering-Plastics Corporation	NOVAREX 7022L1 NOVAREX 7022L2 NOVAREX 7022L3 (coated or uncoated)	POLYCARBONATE	N100 R111 R112 R212 R213 R311 R312 R313 A114 A115 A212 A213 A306 A307 A308 A411 A412	Clear \$ Red \$ Red \$ Red \$ Red \$ Red \$ Red \$ Red \$ Yellow \$ Yellow \$ Yellow \$ Yellow \$ Yellow \$ Yellow \$ Yellow \$ Yellow \$ Yellow \$
www.m-ep.co.jp				

Coated Mitsubishi Engineering Plastics Corp. plastics are only acceptable when treated with the following coating applied to the molded lens: LS123

Information on LS123 coating may be obtained by writing to the following address:

NB Coatings Inc.  
2701 East 170TH Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Mitsubishi	ACRYPET UT 100	POLYMETHYL	001	Clear
Rayon	ACRYPET UT 200	METHACRYLATE	011	Clear
	SHINKOLITE UT 100		101	Red
www.mrc.co.jp	SHINKOLITE UT 200		111	Red
			121	Red
			203	Yellow
			254	Yellow
			264	Yellow
			601	Grey
Mitsubishi	ACRYPET IR	POLYMETHYL	001	Clear
Rayon	ACRYPET NAV	METHACRYLATE	011	Clear
	SHINKOLITE P IR		101	Red
www.mrc.co.jp	SHINKOLITE P NAV		112	Red
			113	Red
			116	Red
			117	Red
			121	Red
			5101	Red
			203	Yellow
			254	Yellow
			255	Yellow
			256	Yellow
			257	Yellow
			258	Yellow
			259	Yellow
			264	Yellow
			265	Yellow
			5203	Yellow
			531	Gray
			541	Gray
			53160	Gray
			53170	Gray
			53180	Gray
			53190	Gray
			54115	Gray
			54135	Gray
			54160	Gray
			54165	Gray
			54170	Gray
Mitsubishi	ACRYPET MD	POLYMETHYL	001	Clear
Rayon	SHINKOLITE P MD	METHACRYLATE	101	Red
			114	Red
www.mrc.co.jp			203	Yellow
Mitsubishi	ACRYPET V	POLYMETHYL	001	Clear
Rayon	SHINKOLITE P V	METHACRYLATE	011	Clear
			101	Red
www.mrc.co.jp			114	Red

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Mitsubishi Rayon  <a href="http://www.mrc.co.jp">www.mrc.co.jp</a>	ACRYPET V SHINKOLITE P V	POLYMETHYL METHACRYLATE	131	Red
			146	Red
			147	Red
			148	Red
			149	Red
			160	Red
			203	Yellow
			236	Yellow
			283	Yellow
			284	Yellow
			285	Yellow
			286	Yellow
			287	Yellow
			288	Yellow
291	Yellow			
292	Yellow			
<hr/>				
Mitsubishi Rayon  <a href="http://www.mrc.co.jp">www.mrc.co.jp</a>	ACRYPET VE ACRYPET VES ACRYPET VH ACRYPET VH4 ACRYPET VHM ACRYPET VHS SHINKOLITE P VE SHINKOLITE P VES SHINKOLITE P VH SHINKOLITE P VHS	POLYMETHYL METHACRYLATE	001	Clear
			361	Clear
			362	Clear
			363	Clear
			364	Clear
			PYR5406	Clear
			007	White
			5204	White
			PR5556	White
			5470	White
			53260	White
			54225	White
			54260	White
			55475	White
			55480	White
			55485	White
			55580	White
			55670	White
			57163	White
			55780	White
			58154	White
			101	Red
			111	Red
112	Red			
113	Red			
116	Red			
117	Red			
120	Red			
121	Red			
128	Red			
129	Red			
141	Red			
142	Red			
143	Red			
151	Red			
1007	Red			
5101	Red			
5101B	Red			
5111	Red			

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Mitsubishi	ACRYPET VE	POLYMETHYL	5112	Red
Rayon	ACRYPET VES	METHACRYLATE	5113	Red
	ACRYPET VH		5114	Red
www.mrc.co.jp	ACRYPET VH4		5115	Red
	ACRYPET VHM		5116	Red
	ACRYPET VHS		5117	Red
	SHINKOLITE P VE		5118	Red
	SHINKOLITE P VES		5119	Red
	SHINKOLITE P VH		5121	Red
	SHINKOLITE P VHS		5131	Red
			5141	Red
			5142	Red
			5143	Red
			5151	Red
			5276	Red
			5296	Red
			5386	Red
			5456	Red
			203	Yellow
			209	Yellow
			252	Yellow
			253	Yellow
			254	Yellow
			255	Yellow
			256	Yellow
			257	Yellow
			258	Yellow
			259	Yellow
			262	Yellow
			263	Yellow
			264	Yellow
			265	Yellow
			266	Yellow
			267	Yellow
			270	Yellow
			290	Yellow
			2001	Yellow
			5203	Yellow
			5206	Yellow
			5213	Yellow
			5223	Yellow
			5233	Yellow
			5243	Yellow
			5253	Yellow
			5256	Yellow
			5263	Yellow
			5266	Yellow
			5273	Yellow
			5283	Yellow
			5293	Yellow
			5303	Yellow
			5313	Yellow
			5323	Yellow
			5333	Yellow
			5343	Yellow
			5353	Yellow

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Mitsubishi	ACRYPET VE	POLYMETHYL	5363	Yellow
Rayon	ACRYPET VES	METHACRYLATE	5373	Yellow
	ACRYPET VH		5383	Yellow
www.mrc.co.jp	ACRYPET VH4		5393	Yellow
	ACRYPET VHM		5403	Yellow
	ACRYPET VHS		5413	Yellow
	SHINKOLITE P VE		5423	Yellow
	SHINKOLITE P VES		531	Gray
	SHINKOLITE P VH		533	Gray
	SHINKOLITE P VHS		541	Gray
			53105	Gray
			53110	Gray
			53120	Gray
			53130	Gray
			53137	Gray
			53140	Gray
			53150	Gray
			53155	Gray
			53160	Gray
			53165	Gray
			53168	Gray
			53170	Gray
			53173	Gray
			53175	Gray
			53178	Gray
			53180	Gray
			53183	Gray
			53185	Gray
			53187	Gray
			53190	Gray
			54107	Gray
			54110	Gray
			54112	Gray
			54115	Gray
			54118	Gray
			54120	Gray
			54130	Gray
			54132	Gray
			54133	Gray
			54135	Gray
			54140	Gray
			54145	Gray
			54155	Gray
			54160	Gray
			54165	Gray
			54170	Gray

Coated Mitsubishi Rayon plastics may only be treated with the following acceptable coatings applied to the molded lens:

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

**Coating in Alphabetical Order and Corresponding Manufacturer**

FUJIHARD HH3012U-6, FUJIHARD HH3012U-7, FUJIHARD HH3012U-8, FUJIHARD HH3012U-9, and FUJIHARD HH3035U, FUJIHARD HH3035U-1, FUJIHARD HH3035U-2, FUJIHARD HH3035U-3,: See Fujikura Kasei Co Ltd

**Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD HH3012U-6, FUJIHARD HH3012U-7, FUJIHARD HH3012U-8, FUJIHARD HH3012U-9, and FUJIHARD HH3035U, FUJIHARD HH3035U-1, FUJIHARD HH3035U-2, FUJIHARD HH3035U-3, coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

NOTE: FUJIHARD HH3012U-6, FUJIHARD HH3012U-7, FUJIHARD HH3012U-8, FUJIHARD HH3012U-9, and FUJIHARD HH3035U, FUJIHARD HH3035U-1, FUJIHARD HH3035U-2, FUJIHARD HH3035U-3, for use only on Acrypet VH grades.

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Mitsubishi	CLEARLAC M100	METHYL	001	Clear
Rayon	CLEARLAC M101	METHACRYLATE/	101	Red
	CLEARLAC M102	STYRENE	5101	Red
www.mrc.co.jp		COPOLYMER	203	Yellow
			5203	Yellow
			531	Gray
			541	Gray

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Mitsubishi	ACRYPET VE	POLYMETHYL	001	Clear
Rayon	ACRYPET VES	METHACRYLATE	361	Clear
Polymer	ACRYPET VH		362	Clear
Nantong Co., Ltd.	ACRYPET VH4		363	Clear
	ACRYPET VHM		364	Clear
www.mrpn.com.cn	ACRYPET VHS		PYR5406	Clear
	SHINKOLITE P VE		007	White
	SHINKOLITE P VES		5204	White
	SHINKOLITE P VH		PR5556	White
	SHINKOLITE P VHS		5470	White
			53260	White
			54225	White
			54260	White
			55475	White
			55480	White
			55485	White
			55580	White
			55670	White
			57163	White
			55780	White
			58154	White
			101	Red
			111	Red
			112	Red
			113	Red
			116	Red
			117	Red
			120	Red
			121	Red
			128	Red
			129	Red
			141	Red
			142	Red
			143	Red
			151	Red
			1007	Red
			5101	Red
			5101B	Red
			5111	Red
			5112	Red
			5113	Red
			5114	Red
			5115	Red
			5116	Red
			5117	Red
			5118	Red
			5119	Red
			5121	Red
			5131	Red
			5141	Red
			5142	Red
			5143	Red
			5151	Red
			5276	Red
			5296	Red

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Mitsubishi	ACRYPET VE	POLYMETHYL	5386	Red
Rayon	ACRYPET VES	METHACRYLATE	5456	Red
Polymer	ACRYPET VH		203	Yellow
Nantong Co., Ltd.	ACRYPET VH4		209	Yellow
	ACRYPET VHM		252	Yellow
www.mrpn.com.cn	ACRYPET VHS		253	Yellow
	SHINKOLITE P VE		254	Yellow
	SHINKOLITE P VES		255	Yellow
	SHINKOLITE P VH		256	Yellow
	SHINKOLITE P VHS		257	Yellow
			258	Yellow
			259	Yellow
			262	Yellow
			263	Yellow
			264	Yellow
			265	Yellow
			266	Yellow
			267	Yellow
			270	Yellow
			290	Yellow
			2001	Yellow
			5203	Yellow
			5206	Yellow
			5213	Yellow
			5223	Yellow
			5233	Yellow
			5243	Yellow
			5253	Yellow
			5256	Yellow
			5263	Yellow
			5266	Yellow
			5273	Yellow
			5283	Yellow
			5293	Yellow
			5303	Yellow
			5313	Yellow
			5323	Yellow
			5333	Yellow
			5343	Yellow
			5353	Yellow
			5363	Yellow
			5373	Yellow
			5383	Yellow
			5393	Yellow
			5403	Yellow
			5413	Yellow
			5423	Yellow
			531	Gray
			533	Gray
			541	Gray
			53105	Gray
			53110	Gray
			53120	Gray
			53130	Gray
			53137	Gray
			53140	Gray

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Mitsubishi	ACRYPET VE	POLYMETHYL	53150	Gray
Rayon	ACRYPET VES	METHACRYLATE	53155	Gray
Polymer	ACRYPET VH		53160	Gray
Nantong Co., Ltd.	ACRYPET VH4		53165	Gray
	ACRYPET VHM		53168	Gray
www.mrpn.com.cn	ACRYPET VHS		53170	Gray
	SHINKOLITE P VE		53173	Gray
	SHINKOLITE P VES		53175	Gray
	SHINKOLITE P VH		53178	Gray
	SHINKOLITE P VHS		53180	Gray
			53183	Gray
			53185	Gray
			53187	Gray
			53190	Gray
			54107	Gray
			54110	Gray
			54112	Gray
			54115	Gray
			54118	Gray
			54120	Gray
			54130	Gray
			54132	Gray
			54133	Gray
			54135	Gray
			54140	Gray
			54145	Gray
			54155	Gray
			54160	Gray
			54165	Gray
			54170	Gray

Coated Mitsubishi Rayon Polymer Nantong Co., Ltd. plastics may only be treated with the following acceptable coatings applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

FUJIHARD HH3012U-6, FUJIHARD HH3012U-7, FUJIHARD HH3012U-8, FUJIHARD HH3012U-9, and FUJIHARD HH3035U, FUJIHARD HH3035U-1, FUJIHARD HH3035U-2, FUJIHARD HH3035U-3, : See Fujikura Kasei Co Ltd

#### **Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD HH3012U-6, FUJIHARD HH3012U-7, FUJIHARD HH3012U-8, FUJIHARD HH3012U-9, and FUJIHARD HH3035U, FUJIHARD HH3035U-1, FUJIHARD HH3035U-2, FUJIHARD HH3035U-3, coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
Japan  
www.fkkasei.co.jp

NOTE: FUJIHARD HH3012U-6, FUJIHARD HH3012U-7, FUJIHARD HH3012U-8, FUJIHARD HH3012U-9, and FUJIHARD HH3035U, FUJIHARD HH3035U-1, FUJIHARD HH3035U-2, FUJIHARD HH3035U-3, for use only on Acrypet VH grades.

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Nantong Rayon. Chemical Co., Ltd.	ACRYPET VE	POLYMETHYL METHACRYLATE	001	Clear
	ACRYPET VES		361	Clear
	ACRYPET VH		362	Clear
	ACRYPET VH4		363	Clear
	ACRYPET VHM		364	Clear
	ACRYPET VHS		PYR5406	Clear
	SHINKOLITE P VE		007	White
	SHINKOLITE P VES		5204	White
	SHINKOLITE P VH		PR5556	White
	SHINKOLITE P VHS		5470	White
			53260	White
			54225	White
			54260	White
			55475	White
			55480	White
			55485	White
			55580	White
			55670	White
			57163	White
			55780	White
			58154	White
			101	Red
			111	Red
			112	Red
			113	Red
			116	Red
			117	Red
			120	Red
			121	Red
			128	Red
			129	Red
			141	Red
	142	Red		
	143	Red		
	151	Red		
	1007	Red		
	5101	Red		
	5101B	Red		
	5111	Red		
	5112	Red		
	5113	Red		
	5114	Red		
	5115	Red		
	5116	Red		
	5117	Red		
	5118	Red		
	5119	Red		
	5121	Red		
	5131	Red		
	5141	Red		
	5142	Red		
	5143	Red		
	5151	Red		

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Nantong Rayon. Chemical Co., Ltd.	ACRYPET VE	POLYMETHYL METHACRYLATE	5276	Red
	ACRYPET VES		5296	Red
	ACRYPET VH		5386	Red
	ACRYPET VH4		5456	Red
	ACRYPET VHM		203	Yellow
	ACRYPET VHS		209	Yellow
	SHINKOLITE P VE		252	Yellow
	SHINKOLITE P VES		253	Yellow
	SHINKOLITE P VH		254	Yellow
	SHINKOLITE P VHS		255	Yellow
			256	Yellow
			257	Yellow
			258	Yellow
			259	Yellow
			262	Yellow
			263	Yellow
			264	Yellow
			265	Yellow
			266	Yellow
			267	Yellow
			270	Yellow
			290	Yellow
			2001	Yellow
			5203	Yellow
			5206	Yellow
			5213	Yellow
			5223	Yellow
			5233	Yellow
			5243	Yellow
			5253	Yellow
			5256	Yellow
			5263	Yellow
			5266	Yellow
	5273	Yellow		
	5283	Yellow		
	5293	Yellow		
	5303	Yellow		
	5313	Yellow		
	5323	Yellow		
	5333	Yellow		
	5343	Yellow		
	5353	Yellow		
	5363	Yellow		
	5373	Yellow		
	5383	Yellow		
	5393	Yellow		
	5403	Yellow		
	5413	Yellow		
	5423	Yellow		
	531	Gray		
	533	Gray		
	541	Gray		
	53105	Gray		
	53110	Gray		
	53120	Gray		
	53130	Gray		

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Nantong Rayon Chemical Co., Ltd.	ACRYPET VE	POLYMETHYL METHACRYLATE	53137	Gray
	ACRYPET VES		53140	Gray
	ACRYPET VH		53150	Gray
	ACRYPET VH4		53155	Gray
	ACRYPET VHM		53160	Gray
	ACRYPET VHS		53165	Gray
	SHINKOLITE P VE		53168	Gray
	SHINKOLITE P VES		53170	Gray
	SHINKOLITE P VH		53173	Gray
	SHINKOLITE P VHS		53175	Gray
			53178	Gray
			53180	Gray
			53183	Gray
			53185	Gray
			53187	Gray
			53190	Gray
			54107	Gray
			54110	Gray
			54112	Gray
			54115	Gray
	54118	Gray		
	54120	Gray		
	54130	Gray		
	54132	Gray		
	54133	Gray		
	54135	Gray		
	54140	Gray		
	54145	Gray		
	54155	Gray		
	54160	Gray		
	54165	Gray		
	54170	Gray		

Coated Nantong Rayon Chemical Co., Ltd. plastics may only be treated with the following acceptable coatings applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

FUJIHARD HH3012U-6, FUJIHARD HH3012U-7, FUJIHARD HH3012U-8, FUJIHARD HH3012U-9, and FUJIHARD HH3035U, FUJIHARD HH3035U-1, FUJIHARD HH3035U-2, FUJIHARD HH3035U-3, : See Fujikura Kasei Co Ltd

#### **Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD HH3012U-6, FUJIHARD HH3012U-7, FUJIHARD HH3012U-8, FUJIHARD HH3012U-9, and FUJIHARD HH3035U, FUJIHARD HH3035U-1, FUJIHARD HH3035U-2, FUJIHARD HH3035U-3, coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

NOTE: FUJIHARD HH3012U-6, FUJIHARD HH3012U-7, FUJIHARD HH3012U-8, FUJIHARD HH3012U-9, and FUJIHARD HH3035U, FUJIHARD HH3035U-1, FUJIHARD HH3035U-2, FUJIHARD HH3035U-3, for use only on Acrypet VH grades.

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Nippon Steel Chemical Co., Ltd. www.nssc.co.jp	ESTYRENE MS-660	METHYL	MA-T3-2342	Clear
		METHACRYLATE/	MA-T3-3122	Red
		STYRENE	MA-T3-3123	Red
		COPOLYMER	MA-T3-3124	Yellow

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Plaskolite, Inc.  www.plaskolite.com	CA-61	POLYMETHYL METHACRYLATE		Clear
	CA-71		RD 01	Red
	CA-75		RD 03	Red
	CA-82		RD 05	Red
	CA-924		RD 10	Red
	CA-927		RD 80	Red
	CA-1000E		RD 110	Red
	CA-1000I		RD 114	Red
	CP-61		RD 117	Red
	CP-71		RD 125	Red
	CP-75		RD 126	Red
	CP-82		RD 128	Red
	CP-86		RD 145	Red
	CP-86 UVA		RD 169	Red
	CP-924		RD 171	Red
	CP-927		RD 176	Red
	CP-1000E		RD 180	Red
	CP-1000I		RD 181	Red
			RD 187	Red
			RD 188	Red
			RD 189	Red
			RD 190	Red
			RD 191	Red
			RD 192	Red
			RD 195	Red
			YL 07	Yellow
			YL 12	Yellow
			YL 48	Yellow
			YL 64	Yellow
			YL 87	Yellow
			YL 90	Yellow
			YL 91	Yellow
			YL 99	Yellow
			YL 102	Yellow
			YL 130	Yellow
			YL 131	Yellow
	YL 133	Yellow		
	YL 198	Yellow		
	BL 35	Blue		
	BL 92	Blue		
	BL 142	Blue		
	GY 58102	Gray		
	GY 58200	Gray		
	GY 58240	Gray		

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Plaskolite, Inc.  www.plaskolite.com	PL-30 MS983	POLYMETHYL METHACRYLATE	NC 10	Clear
			RD 01	Red
			RD 03	Red
			RD 05	Red
			RD 10	Red
			RD 80	Red
			RD 110	Red
			RD 114	Red
			RD 117	Red
			RD 125	Red
			RD 126	Red
			RD 128	Red
			RD 145	Red
			RD 169	Red
			RD 171	Red
			RD 176	Red
			RD 180	Red
			RD 181	Red
			RD 187	Red
			RD 188	Red
			RD 189	Red
			RD 190	Red
			RD 191	Red
			RD 192	Red
			RD 195	Red
			YL 07	Yellow
			YL 12	Yellow
			YL 48	Yellow
			YL 64	Yellow
			YL 87	Yellow
			YL 90	Yellow
			YL 91	Yellow
			YL 99	Yellow
			YL 102	Yellow
			YL 130	Yellow
			YL 131	Yellow
			YL 133	Yellow
YL 198	Yellow			
BL 35	Blue			
BL 95	Blue			
BL 142	Blue			
GY 58102	Gray			
GY 58200	Gray			
GY 58240	Gray			

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
QUINN PLASTICS	QUINN ACRYL G 77	POLYMETHYL	KK 000	Clear
GmbH	QUINN ACRYL G 77E	METHACRYLATE	RT 011	Red
	QUINN ACRYL G 87E		RT 014	Red
www.quinn-plastics.com	QUINN ACRYL G 88		RT 018	Red
	QUINN ACRYL G 88E		RT 045	Red
(Formerly Barlo	QUINN ACRYL G 88 Q11		RT 049	Red
Plastics GmbH)	QUINN ACRYL G 88 Q18		RT 050	Red
	QUINN ACRYL KR 2006/1		RT 051	Red
	QUINN ACRYL KR 2007/1		RT 053	Red
	QUINN ACRYL KR 2008/1		RT 055	Red
	(Formerly LUCRYL)		RT 057	Red
			RT 058	Red
			RT 059	Red
			RT 060	Red
			RT 063	Red
			RT 064	Red
			RT 066	Red
			RT 067	Red
			RT 068	Red
			RT 070	Red
			RT 071	Red
			RT 072	Red
			RT 074	Red
			RT 075	Red
			RT 076	Red
			RT 079	Red
			RT 080	Red
			OR 002	Yellow
			OR 005	Yellow
			OR 007	Yellow
			OR 008	Yellow
			OR 013	Yellow
			OR 028	Yellow
			OR 037	Yellow
			OR 050	Yellow
			OR 072	Yellow
			OR 078	Yellow

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Ryoko Co., Ltd.	ACRYPET VE	POLYMETHYL	001	Clear
	ACRYPET VES	METHACRYLATE	361	Clear
www.kkryoko.co.jp	ACRYPET VH		362	Clear
	ACRYPET VH4		363	Clear
	ACRYPET VHM		364	Clear
	ACRYPET VHS		PYR5406	Clear
	SHINKOLITE P VE		007	White
	SHINKOLITE P VES		5204	White
	SHINKOLITE P VH		PR5556	White
	SHINKOLITE P VHS		5470	White
			53260	White
			54225	White
			54260	White
			55475	White
			55480	White
			55485	White
			55580	White
			55670	White
			57163	White
			55780	White
			58154	White
			101	Red
			111	Red
			112	Red
			113	Red
			116	Red
			117	Red
			120	Red
			121	Red
			128	Red
			129	Red
			141	Red
			142	Red
			143	Red
			151	Red
			1007	Red
			5101	Red
			5101B	Red
			5111	Red
			5112	Red
			5113	Red
			5114	Red
			5115	Red
			5116	Red
			5117	Red
			5118	Red
			5119	Red
			5121	Red
			5131	Red
			5141	Red
			5142	Red
			5143	Red
			5151	Red
			5276	Red
			5296	Red

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Ryoko Co., Ltd.	ACRYPET VE	POLYMETHYL	5386	Red
	ACRYPET VES	METHACRYLATE	5456	Red
www.kkryoko.co.jp	ACRYPET VH		203	Yellow
	ACRYPET VH4		209	Yellow
	ACRYPET VHM		252	Yellow
	ACRYPET VHS		253	Yellow
	SHINKOLITE P VE		254	Yellow
	SHINKOLITE P VES		255	Yellow
	SHINKOLITE P VH		256	Yellow
	SHINKOLITE P VHS		257	Yellow
			258	Yellow
			259	Yellow
			262	Yellow
			263	Yellow
			264	Yellow
			265	Yellow
			266	Yellow
			267	Yellow
			270	Yellow
			290	Yellow
			2001	Yellow
			5203	Yellow
			5206	Yellow
			5213	Yellow
			5223	Yellow
			5233	Yellow
			5243	Yellow
			5253	Yellow
			5256	Yellow
			5263	Yellow
			5266	Yellow
			5273	Yellow
			5283	Yellow
			5293	Yellow
			5303	Yellow
			5313	Yellow
			5323	Yellow
			5333	Yellow
			5343	Yellow
			5353	Yellow
			5363	Yellow
			5373	Yellow
			5383	Yellow
			5393	Yellow
			5403	Yellow
			5413	Yellow
			5423	Yellow
			531	Gray
			533	Gray
			541	Gray
			53105	Gray
			53110	Gray
			53120	Gray
			53130	Gray
			53137	Gray
			53140	Gray

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Ryoko Co., Ltd.	ACRYPET VE	POLYMETHYL	53150	Gray
	ACRYPET VES	METHACRYLATE	53155	Gray
www.kkryoko.co.jp	ACRYPET VH		53160	Gray
	ACRYPET VH4		53165	Gray
	ACRYPET VHM		53168	Gray
	ACRYPET VHS		53170	Gray
	SHINKOLITE P VE		53173	Gray
	SHINKOLITE P VES		53175	Gray
	SHINKOLITE P VH		53178	Gray
	SHINKOLITE P VHS		53180	Gray
			53183	Gray
			53185	Gray
			53187	Gray
			53190	Gray
			54107	Gray
			54110	Gray
			54112	Gray
			54115	Gray
			54118	Gray
			54120	Gray
			54130	Gray
			54132	Gray
			54133	Gray
			54135	Gray
			54140	Gray
			54145	Gray
			54155	Gray
			54160	Gray
			54165	Gray
			54170	Gray

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sabic Innovative Plastics, USA	LEXAN LS-1	POLYCARBONATE	111	White #!
	LEXAN LS-1A		111C	White #!
	LEXAN LS-2		111H	White #!
	LEXAN LS-2A		111M	White #!
www.sabic-ip.com	LEXAN LS-3		111S	White #!
	LEXAN LSHF (HIGH FLOW) (coated or uncoated)		112	White #!
			51073	Smoke Grey #!
			71127	Smoke Grey #!
(Formerly GE Plastics U.S.A.)			71194	Smoke Grey #!
			71274	Smoke Grey #!
			GY3A578T	Smoke Grey #!
			6111	Red #!
			6162	Red #!
			6164	Red #!
			61014	Red #!
			61079	Red #!
			61154	Red #!
			61228	Red #!
			414	Yellow #!
			4135	Yellow #!
			4158	Yellow #!
			4168	Yellow #!
			4169	Yellow #!
			4173	Yellow #!
			4194	Yellow #!
			41105	Yellow #!
			41152	Yellow #!
			YW 5005T	Yellow #!
			21242	Clear Blue #!
			2148	Clear Blue #!

Coated Sabic Innovative Plastics USA plastics may only be treated with the following acceptable coatings applied to the molded lens:

#### Coating in Alphabetical Order and Corresponding Manufacturer

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-700, Acryking PH-710 coatings: See Mitsubishi Rayon Co., Ltd.

Fujikura Kasei Hard Coatings

FUJIHARD 2500

FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2,

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3,

FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9

FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3,

FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3,

FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2

FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Fujikura Kasei Coatings FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, FUJISOFT 2604 coatings: See Fujikura Kasei Co., Ltd.				
KUV-1000, KUV-2000 and KUV-3000: See KCC Corporation				
LHP100/LHC100, LHP100/AS4000: See Momentive Performance Materials Inc.				
LS123: See NB Coatings Inc.				
Permaclear V88VC31: See Sherman Williams				
PHC 200, PHC587, PHC587B, PHC587C: See Momentive Performance Materials Inc.				
SH2, SH-41, SH-50: See Stanley Electric Co., Ltd.				
SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000: See Momentive Performance Materials Inc.				
UT-2053 hard coat: Nippon Bee Chemical Co., Ltd.				
UVHC3000, UHVC3000K, UHVC3000K1 and UVHC3000K-Z: See Momentive Performance Materials Inc.				
UVT200V1, UVT200V2, UVT200V3 and UVT200V5: See Red Spot.				
UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8: See Red Spot.				

### Coating Manufacturer in Alphabetical Order

Information on FUJIHARD 2500, FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3, FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3, FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2, FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7 and FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, and FUJISOFT 2604 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

Note: FUJISOFT 2601 may NOT be used on lenses incorporating a reflex reflector or in front of a reflex reflector.

Note: FUJIHARD HH2566U-series and HH2567U-series for use on clear lenses only

(Coating information continued on the next page)

Note: FUJIHARD HH2540U-series, HH2570U-series, HH2561U-series and HH9986U-series is for use on clear LS-2 plastics only

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on KUV-1000, KUV-2000 and KUV-3000 coating may be obtained by writing to the following address:

KCC Corporation  
 83, Mabook-Dong, Giheung-Gu, Yongin-Si  
 Gyunggi-Do, Kroea  
[www.kccworld.co.kr](http://www.kccworld.co.kr)

Note: KUV-1000 and KUV-3000 suitable for 6.4mm LS2-111 lenses only.

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-700, Acryking PH-710 coatings may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
 6-41, Konan 1-chome,  
 Minato-ku, Tokyo 108-8506  
 Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

NOTE: Acryking PH-350, PH-511, PH-700, PH-710 for use on LS-2 with clear lenses only

Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000, PHC 200, PHC587, PHC587B, PHC587C, UVHC3000, UVHC3000K, UVHC3000K1, and UVHC3000K-Z hard coats may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 <a href="http://www.momentive.com">www.momentive.com</a>
---	--

Information on LS123 hard coat may be obtained by writing to the following address:

NB Coatings Inc.  
 2701 East 170TH Street  
 Lansing, IL 60438  
<http://www.nbcoatings.com/>

Information on UT-2053 hard coat may be obtained by writing to the following address:

Nippon Bee Chemical Co., Ltd.  
 2-14-1, Shondai-Ohtani Hirakata-City  
 Osaka, Japan  
[www.nipponbeechemical.jp](http://www.nipponbeechemical.jp)

NOTE: UT- 2053 for use on LS-2 with clear lenses only  
 (Coating information continued on the next page)

<b><u>MFR.</u></b>	<b><u>TRADE NAME AND FLOW FORMULATION</u></b>	<b><u>TYPE OF RESIN</u></b>	<b><u>NUMBER</u></b>	<b><u>COLOR</u></b>
--------------------	---	-----------------------------	----------------------	---------------------

Information on UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coating may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

NOTE: Red Spot UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 is only acceptable LS-1, and LS-2,

Information on SH2, SH41 and SH-50 hard coats may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

Information on Permaclear V88VC31 coatings may be obtained by writing to the following address:

Sherwin-Williams Automotive Finishes Corp.  
388 Robins Drive  
Troy, MI 48083  
[www.sherwin-automotive.com](http://www.sherwin-automotive.com)

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sabic Innovative Plastics, Australia	LEXAN LS-1	POLYCARBONATE	111	White #!
	LEXAN LS-1A		111C	White #!
	LEXAN LS-2		111H	White #!
www.sabic-ip.com	LEXAN LS-2A		111M	White #!
	LEXAN LS-3		111S	White #!
	LEXAN LSHF (HIGH FLOW) (coated or uncoated)		112	White #!
			51073	Smoke Grey #!
			71127	Smoke Grey #!
(Formerly GE Plastics Australia)			71194	Smoke Grey #!
			71274	Smoke Grey #!
			GY3A578T	Smoke Grey #!
			6111	Red #!
			6162	Red #!
			6164	Red #!
			61014	Red #!
			61079	Red #!
			61154	Red #!
			61228	Red #!
			414	Yellow #!
			4135	Yellow #!
			4158	Yellow #!
			4168	Yellow #!
			4169	Yellow #!
			4173	Yellow #!
			4194	Yellow #!
			41105	Yellow #!
			41152	Yellow #!
			YW 5005T	Yellow #!
			21242	Clear Blue #!
			2148	Clear Blue #!

Coated Sabic Innovative Plastics Australia plastics may only be treated with the following acceptable coatings applied to the molded lens:

#### Coating in Alphabetical Order and Corresponding Manufacturer

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-710, and Acryking PH-710 coatings: See Mitsubishi Rayon Co., Ltd.

Fujikura Kasei Hard Coatings

FUJIHARD 2500

FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2,

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3,

FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9

FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3,

FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3,

FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2

FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Fujikura Kasei Coatings FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, FUJISOFT 2604 coatings: See Fujikura Kasei Co., Ltd.				
KUV-1000, KUV-2000 and KUV-3000: See KCC Corporation				
LS123: See NB Coatings Inc.				
LHP100/LHC100, LHP100/AS4000: See Momentive Performance Materials Inc.				
Permaclear V88VC31: See Sherman Williams				
PHC 200, PHC587, PHC587B, PHC587C: See Momentive Performance Materials Inc.				
SH2, SH-41, SH-50: See Stanley Electric Co., Ltd.				
SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000: See Momentive Performance Materials Inc.				
UT-2053 hard coat: Nippon Bee Chemical Co., Ltd.				
UVHC3000, UHVC3000K, UHVC3000K1 and UVHC3000K-Z: See Momentive Performance Materials Inc.				
UVT200V1, UVT200V2, UVT200V3, UVT200V5: See Red Spot.				
UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8: See Red Spot.				

### Coating Manufacturer in Alphabetical Order

Information on FUJIHARD 2500, FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3, FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3, FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2, FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7 and FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, and FUJISOFT 2604 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

Note: FUJISOFT 2601 may NOT be used on lenses incorporating a reflex reflector or in front of a reflex reflector.

Note: FUJIHARD HH2566U-series and HH2567U-series for use on clear lenses only

Note: FUJIHARD HH2540U-series, HH2570U-series, HH2561U-series and HH9986U-series is for use on clear LS-2 plastics only

(Coating information continued on the next page)

<b><u>MFR.</u></b>	<b><u>TRADE NAME AND FLOW FORMULATION</u></b>	<b><u>TYPE OF RESIN</u></b>	<b><u>NUMBER</u></b>	<b><u>COLOR</u></b>
--------------------	---	-----------------------------	----------------------	---------------------

Information on KUV-1000, KUV-2000 and KUV-3000 coating may be obtained by writing to the following address:

KCC Corporation  
 83, Mabook-Dong, Giheung-Gu, Yongin-Si  
 Gyunggi-Do, Kroea  
[www.kccworld.co.kr](http://www.kccworld.co.kr)

Note: KUV-1000 and KUV-3000 suitable for 6.4mm LS2-111 lenses only.

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-700, Acryking PH-710 coatings may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
 6-41, Konan 1-chome,  
 Minato-ku, Tokyo 108-8506  
 Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

NOTE: Acryking PH-350, PH-511, PH-700, PH-710 for use on LS-2 with clear lenses only

Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000, PHC 200, PHC587, PHC587B, PHC587C, UVHC3000, UVHC3000K, UVHC3000K1, and UVHC3000K-Z hard coats may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 <a href="http://www.momentive.com">www.momentive.com</a>
---	--

Information on LS123 hard coat may be obtained by writing to the following address:

NB Coatings Inc.  
 2701 East 170TH Street  
 Lansing, IL 60438  
<http://www.nbcoatings.com/>

Information on UT-2053 hard coat may be obtained by writing to the following address:

Nippon Bee Chemical Co., Ltd.  
 2-14-1, Shondai-Ohtani Hirakata-City  
 Osaka, Japan  
[www.nipponbeechemical.jp](http://www.nipponbeechemical.jp)

NOTE: UT- 2053 for use on LS-2 with clear lenses only

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coating may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

NOTE: Red Spot UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 is only acceptable LS-1, and LS-2,

Information on SH2, SH41 and SH-50 hard coats may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

Information on Permaclear V88VC31 coatings may be obtained by writing to the following address:

Sherwin-Williams Automotive Finishes Corp.  
388 Robins Drive  
Troy, MI 48083  
[www.sherwin-automotive.com](http://www.sherwin-automotive.com)

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sabic Innovative	LEXAN LS-1	POLYCARBONATE	111	White #!
Plastics, Nansha	LEXAN LS-1A		111C	White #!
China	LEXAN LS-2		111H	White #!
	LEXAN LS-2A		111M	White #!
www.sabic-ip.com	LEXAN LS-3		111S	White #!
	LEXAN LSHF (HIGH FLOW)		112	White #!
	(coated or uncoated)		51073	Smoke Grey #!
			71127	Smoke Grey #!
			71194	Smoke Grey #!
(Formerly GE Plastics Nansha, China)			71274	Smoke Grey #!
			GY3A578T	Smoke Grey #!
			6111	Red #!
			6162	Red #!
			6164	Red #!
			61014	Red #!
			61079	Red #!
			61154	Red #!
			61228	Red #!
			414	Yellow #!
			4135	Yellow #!
			4158	Yellow #!
			4168	Yellow #!
			4169	Yellow #!
			4173	Yellow #!
			4194	Yellow #!
			41105	Yellow #!
			41152	Yellow #!
			YW 5005T	Yellow #!
			21242	Clear Blue #!
			2148	Clear Blue #!

Coated Sabic Innovative Plastics Nansha, China plastics may only be treated with the following acceptable coatings applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-700, and Acryking PH-710 coatings: See Mitsubishi Rayon Co., Ltd.

Fujikura Kasei Hard Coatings

FUJIHARD 2500

FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2,

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3,

FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9

FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3,

FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3,

FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2

FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7

Fujikura Kasei Coatings

FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, FUJISOFT 2604 coatings: See Fujikura Kasei Co., Ltd.

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
KUV-1000, KUV-2000 and KUV-3000:	See KCC Corporation			
LS123:	See NB Coatings Inc.			
LHP100/LHC100, LHP100/AS4000:	See Momentive Performance Materials Inc.			
Permaclear V88VC31:	See Sherman Williams			
PHC 200, PHC587, PHC587B, PHC587C:	See Momentive Performance Materials Inc.			
SH2, SH-41, SH-50:	See Stanley Electric Co., Ltd.			
SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000:	See Momentive Performance Materials Inc.			
UT-2053 hard coat:	Nippon Bee Chemical Co., Ltd.			
UVHC3000, UHVC3000K, UHVC3000K1 and UVHC3000K-Z:	See Momentive Performance Materials Inc.			
UVT200V1, UVT200V2, UVT200V3 and UVT200V5:	See Red Spot.			
UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8:	See Red Spot.			

### **Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD 2500, FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3, FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3, FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2, FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7 and FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, and FUJISOFT 2604 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

Note: FUJISOFT 2601 may NOT be used on lenses incorporating a reflex reflector or in front of a reflex reflector.

Note: FUJIHARD HH2566U-series and HH2567U-series for use on clear lenses only

Note: FUJIHARD HH2540U-series, HH2570U-series, HH2561U-series and HH9986U-series is for use on clear LS-2 plastics only

(Coating information continued on the next page)

Information on KUV-1000, KUV-2000 and KUV-3000 coating may be obtained by writing to the following address:

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

KCC Corporation  
83, Mabook-Dong, Giheung-Gu, Yongin-Si  
Gyunggi-Do, Kroea  
[www.kccworld.co.kr](http://www.kccworld.co.kr)

Note: KUV-1000 and KUV-3000 suitable for 6.4mm LS2-111 lenses only.

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-700, Acryking PH-710 coatings may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-chome,  
Minato-ku, Tokyo 108-8506  
Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

NOTE: Acryking PH-350, PH-511, PH-700, PH-710 for use on LS-2 with clear lenses only

Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000, PHC 200, PHC587, PHC587B, PHC587C, UVHC3000, UVHC3000K, UVHC3000K1, and UVHC3000K-Z hard coats may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 <a href="http://www.momentive.com">www.momentive.com</a>
---	--

Information on UT-2053 hard coat may be obtained by writing to the following address:

Nippon Bee Chemical Co., Ltd.  
2-14-1, Shondai-Ohtani Hirakata-City  
Osaka, Japan  
[www.nipponbeechemical.jp](http://www.nipponbeechemical.jp)

NOTE: UT- 2053 for use on LS-2 with clear lenses only

Information on LS123 hard coat may be obtained by writing to the following address:

NB Coatings Inc.  
2701 East 170TH Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>

(Coating information continued on the next page)

Information on UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coating may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

NOTE: Red Spot UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 is only acceptable LS-1, and LS-2,

Information on SH2, SH41 and SH-50 hard coats may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

Information on Permaclear V88VC31 coatings may be obtained by writing to the following address:

Sherwin-Williams Automotive Finishes Corp.  
388 Robins Drive  
Troy, MI 48083  
[www.sherwin-automotive.com](http://www.sherwin-automotive.com)

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sabic Innovative	LEXAN LS-1	POLYCARBONATE	111	White #!
Plastics, Shanghai	LEXAN LS-1A		111C	White #!
China	LEXAN LS-2		111H	White #!
	LEXAN LS-2A		111M	White #!
www.sabic-ip.com	LEXAN LS-3		111S	White #!
	LEXAN LSHF (HIGH FLOW)		112	White #!
	(coated or uncoated)		51073	Smoke Grey #!
			71127	Smoke Grey #!
			71194	Smoke Grey #!
(Formerly GE Plastics Shanghai, China)			71274	Smoke Grey #!
			GY3A578T	Smoke Grey #!
			6111	Red #!
			6162	Red #!
			6164	Red #!
			61014	Red #!
			61079	Red #!
			61154	Red #!
			61228	Red #!
			414	Yellow #!
			4135	Yellow #!
			4158	Yellow #!
			4168	Yellow #!
			4169	Yellow #!
			4173	Yellow #!
			4194	Yellow #!
			41105	Yellow #!
			41152	Yellow #!
			YW 5005T	Yellow #!
			21242	Clear Blue #!
			2148	Clear Blue #!

Coated Sabic Innovative Plastics Shanghai, China plastics may only be treated with the following acceptable coatings applied to the molded lens:

#### Coating in Alphabetical Order and Corresponding Manufacturer

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-700, Acryking PH-710 coatings: See Mitsubishi Rayon Co., Ltd.

Fujikura Kasei Hard Coatings

FUJIHARD 2500

FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2,  
FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3,  
FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9  
FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3,  
FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3,  
FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2  
FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7

Fujikura Kasei Coatings

FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, FUJISOFT 2604 coatings: See Fujikura Kasei Co., Ltd.

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
	KUV-1000, KUV-2000 and KUV-3000: See KCC Corporation			
	LS123: See NB Coatings Inc.			
	LHP100/LHC100, LHP100/AS4000: See Momentive Performance Materials Inc.			
	Permaclear V88VC31: See Sherman Williams			
	PHC 200, PHC587, PHC587B, PHC587C: See Momentive Performance Materials Inc.			
	SH2, SH-41, SH-50: See Stanley Electric Co., Ltd.			
	SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000: See Momentive Performance Materials Inc.			
	UT-2053 hard coat: Nippon Bee Chemical Co., Ltd.			
	UVHC3000, UHVC3000K, UHVC3000K1 and UVHC3000K-Z: See Momentive Performance Materials Inc.			
	UVT200V1, UVT200V2, UVT200V3 and UVT200V5: See Red Spot.			
	UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8: See Red Spot.			

### **Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD 2500, FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3, FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3, FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2, FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7 and FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, and FUJISOFT 2604 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

Note: FUJISOFT 2601 may NOT be used on lenses incorporating a reflex reflector or in front of a reflex reflector.

Note: FUJIHARD HH2566U-series and HH2567U-series for use on clear lenses only

Note: FUJIHARD HH2540U-series, HH2570U-series, HH2561U-series and HH9986U-series is for use on clear LS-2 plastics only

(Coating information continued on the next page)

Information on KUV-1000, KUV-2000 and KUV-3000 coating may be obtained by writing to the following address:

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

KCC Corporation  
83, Mabook-Dong, Giheung-Gu, Yongin-Si  
Gyunggi-Do, Kroea  
[www.kccworld.co.kr](http://www.kccworld.co.kr)

Note: KUV-1000 and KUV-3000 suitable for 6.4mm LS2-111 lenses only.

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-700, Acryking PH-710 coatings may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-chome,  
Minato-ku, Tokyo 108-8506  
Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

NOTE: Acryking PH-350, PH-511, PH-700, PH-710 for use on LS-2 with clear lenses only

Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000, PHC 200, PHC587, PHC587B, PHC587C, UVHC3000, UVHC3000K, UVHC3000K1, and UVHC3000K-Z hard coats may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 <a href="http://www.momentive.com">www.momentive.com</a>
---	--

Information on LS123 hard coat may be obtained by writing to the following address:

NB Coatings Inc.  
2701 East 170TH Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>

Information on UT-2053 hard coat may be obtained by writing to the following address:

Nippon Bee Chemical Co., Ltd.  
2-14-1, Shondai-Ohtani Hirakata-City  
Osaka, Japan  
[www.nipponbeechemical.jp](http://www.nipponbeechemical.jp)

NOTE: UT- 2053 for use on LS-2 with clear lenses only

(Coating information continued on the next page)

<b><u>MFR.</u></b>	<b><u>TRADE NAME AND FLOW FORMULATION</u></b>	<b><u>TYPE OF RESIN</u></b>	<b><u>NUMBER</u></b>	<b><u>COLOR</u></b>
--------------------	---	-----------------------------	----------------------	---------------------

Information on UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coating may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

NOTE: Red Spot UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 is only acceptable LS-1, and LS-2,

Information on SH2, SH41 and SH-50 hard coats may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

Information on Permaclear V88VC31 coatings may be obtained by writing to the following address:

Sherwin-Williams Automotive Finishes Corp.  
388 Robins Drive  
Troy, MI 48083  
[www.sherwin-automotive.com](http://www.sherwin-automotive.com)

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sabic Innovative Plastics, Europe	LEXAN LS-1	POLYCARBONATE	111	White #!
	LEXAN LS-1A		111C	White #!
www.sabic-ip.com	LEXAN LS-2		111H	White #!
	LEXAN LS-2A		111M	White #!
	LEXAN LS-3		111S	White #!
	LEXAN LSHF (HIGH FLOW) (coated or uncoated)		112	White #!
			51073	Smoke Grey #!
			71127	Smoke Grey #!
			71194	Smoke Grey #!
(Formerly GE Plastics Europe)			71274	Smoke Grey #!
			GY3A578T	Smoke Grey #!
			6111	Red #!
			6162	Red #!
			6164	Red #!
			61014	Red #!
			61079	Red #!
			61154	Red #!
			61228	Red #!
			414	Yellow #!
			4135	Yellow #!
			4158	Yellow #!
			4168	Yellow #!
			4169	Yellow #!
			4173	Yellow #!
			4194	Yellow #!
			41105	Yellow #!
			41152	Yellow #!
			YW 5005T	Yellow #!
			21242	Clear Blue #!
		2148	Clear Blue #!	

Coated Sabic Innovative Plastics Europe plastics may only be treated with the following acceptable coatings applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-700, Acryking PH-710 coatings: See Mitsubishi Rayon Co., Ltd.

Fujikura Kasei Hard Coatings

FUJIHARD 2500

FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2,

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3,

FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9,

FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3,

FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3,

FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2

FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Fujikura Kasei Coatings	FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, FUJISOFT 2604 coatings:			See Fujikura Kasei Co., Ltd.
	KUV-1000, KUV-2000 and KUV-3000:			See KCC Corporation
	LS123:			See NB Coatings Inc.
	LHP100/LHC100, LHP100/AS4000:			See Momentive Performance Materials Inc.
	Permaclear V88VC31:			See Sherman Williams
	PHC 200, PHC587, PHC587B, PHC587C:			See Momentive Performance Materials Inc.
	SH2, SH-41, SH-50:			See Stanley Electric Co., Ltd.
	SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000:			See Momentive Performance Materials Inc.
	UT-2053 hard coat:			Nippon Bee Chemical Co., Ltd.
	UVHC3000, UHVC3000K, UHVC3000K1 and UVHC3000K-Z:			See Momentive Performance Materials Inc.
	UVT200V1, UVT200V2, UVT200V3 and UVT200V5:			See Red Spot.
	UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8:			See Red Spot.

### Coating Manufacturer in Alphabetical Order

Information on FUJIHARD 2500, FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3, FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3, FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2, FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7 and FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, and FUJISOFT 2604 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
Japan  
www.fkkasei.co.jp

Note: FUJISOFT 2601 may NOT be used on lenses incorporating a reflex reflector or in front of a reflex reflector.

Note: FUJIHARD HH2566U-series and HH2567U-series for use on clear lenses only

Note: FUJIHARD HH2540U-series, HH2570U-series, HH2561U-series and HH9986U-series is for use on clear LS-2 plastics only

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on KUV-1000, KUV-2000 and KUV-3000 coating may be obtained by writing to the following address:

KCC Corporation  
 83, Mabook-Dong, Giheung-Gu, Yongin-Si  
 Gyunggi-Do, Kroea  
[www.kccworld.co.kr](http://www.kccworld.co.kr)

Note: KUV-1000 and KUV-3000 suitable for 6.4mm LS2-111 lenses only.

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-710 coatings may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
 6-41, Konan 1-chome,  
 Minato-ku, Tokyo 108-8506  
 Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

NOTE: Acryking PH-350, PH-511, PH-700, PH-710 for use on LS-2 with clear lenses only

Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000, PHC 200, PHC587, PHC587B, PHC587C, UVHC3000, UVHC3000K, UVHC3000K1, and UVHC3000K-Z hard coats may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 <a href="http://www.momentive.com">www.momentive.com</a>
---	--

Information on LS123 hard coat may be obtained by writing to the following address:

NB Coatings Inc.  
 2701 East 170TH Street  
 Lansing, IL 60438  
<http://www.nbcoatings.com/>

Information on UT-2053 hard coat may be obtained by writing to the following address:

Nippon Bee Chemical Co., Ltd.  
 2-14-1, Shondai-Ohtani Hirakata-City  
 Osaka, Japan  
[www.nipponbeechemical.jp](http://www.nipponbeechemical.jp)

NOTE: UT- 2053 for use on LS-2 with clear lenses only  
 (Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coating may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

NOTE: Red Spot UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 is only acceptable LS-1, and LS-2,

Information on SH2, SH41 and SH-50 hard coats may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

Information on Permaclear V88VC31 coatings may be obtained by writing to the following address:

Sherwin-Williams Automotive Finishes Corp.  
388 Robins Drive  
Troy, MI 48083  
[www.sherwin-automotive.com](http://www.sherwin-automotive.com)

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sabic Innovative Plastics, Japan	LEXAN LS-1	POLYCARBONATE	111	White #!
	LEXAN LS-1A		111C	White #!
www.sabic-ip.com  (Formerly GE Plastics Japan)	LEXAN LS-2		111H	White #!
	LEXAN LS-2A		111M	White #!
	LEXAN LS-3		111S	White #!
	LEXAN LSHF (HIGH FLOW) (coated or uncoated)		112	White #!
			51073	Smoke Grey #!
			71127	Smoke Grey #!
			71194	Smoke Grey #!
			71274	Smoke Grey #!
			GY3A578T	Smoke Grey #!
			6111	Red #!
		6162	Red #!	
		6164	Red #!	
		61014	Red #!	
		61079	Red #!	
		61154	Red #!	
		61228	Red #!	
		414	Yellow #!	
		4135	Yellow #!	
		4158	Yellow #!	
		4168	Yellow #!	
		4169	Yellow #!	
		4173	Yellow #!	
		4194	Yellow #!	
		41105	Yellow #!	
		41152	Yellow #!	
		YW 5005T	Yellow #!	
		21242	Clear Blue #!	
		2148	Clear Blue #!	

Coated Sabic Innovative Plastics Japan plastics may only be treated with the following acceptable coatings applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-700, Acryking PH-710 coatings: See Mitsubishi Rayon Co., Ltd.

Fujikura Kasei Hard Coatings

FUJIHARD 2500

FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2,  
FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3,  
FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9  
FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3,  
FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3,  
FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2  
FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7

Fujikura Kasei Coatings

FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, FUJISOFT 2604 coatings: See Fujikura Kasei Co., Ltd.

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
	KUV-1000, KUV-2000 and KUV-3000: See KCC Corporation			
	LS123: See NB Coatings Inc.			
	LHP100/LHC100, LHP100/AS4000: See Momentive Performance Materials Inc.			
	Permaclear V88VC31: See Sherman Williams			
	PHC 200, PHC587, PHC587B, PHC587C: See Momentive Performance Materials Inc.			
	SH2, SH-41, SH-50: See Stanley Electric Co., Ltd.			
	SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000: See Momentive Performance Materials Inc.			
	UT-2053 hard coat: Nippon Bee Chemical Co., Ltd.			
	UVHC3000, UHVC3000K, UHVC3000K1 and UVHC3000K-Z: See Momentive Performance Materials Inc.			
	UVT200V1, UVT200V2, UVT200V3 and UVT200V5: See Red Spot.			
	UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8: See Red Spot.			

#### **Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD 2500, FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3, FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3, FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2, FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7 and FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, and FUJISOFT 2604 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

Note: FUJISOFT 2601 may NOT be used on lenses incorporating a reflex reflector or in front of a reflex reflector.

Note: FUJIHARD HH2566U-series and HH2567U-series for use on clear lenses only

Note: FUJIHARD HH2540U-series, HH2570U-series, HH2561U-series and HH9986U-series is for use on clear LS-2 plastics only

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on KUV-1000, KUV-2000 and KUV-3000 coating may be obtained by writing to the following address:

KCC Corporation  
83, Mabook-Dong, Giheung-Gu, Yongin-Si  
Gyunggi-Do, Kroea  
[www.kccworld.co.kr](http://www.kccworld.co.kr)

Note: KUV-1000 and KUV-3000 suitable for 6.4mm LS2-111 lenses only.

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-700, Acryking PH-710 coatings may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-chome,  
Minato-ku, Tokyo 108-8506  
Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

NOTE: Acryking PH-350, PH-511, PH-700, PH-710 for use on LS-2 with clear lenses only

Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000, PHC 200, PHC587, PHC587B, PHC587C, UVHC3000, UVHC3000K, UVHC3000K1, and UVHC3000K-Z hard coats may be obtained by writing to the following address:

<p>Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany</p>	<p>Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 <a href="http://www.momentive.com">www.momentive.com</a></p>
---	--

Information on LS123 hard coat may be obtained by writing to the following address:

NB Coatings Inc.  
2701 East 170TH Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>

Information on UT-2053 hard coat may be obtained by writing to the following address:

Nippon Bee Chemical Co., Ltd.  
2-14-1, Shondai-Ohtani Hirakata-City  
Osaka, Japan  
[www.nipponbeechemical.jp](http://www.nipponbeechemical.jp)

NOTE: UT- 2053 for use on LS-2 with clear lenses only

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coating may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

NOTE: Red Spot UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 is only acceptable LS-1, and LS-2,

Information on SH2, SH41 and SH-50 hard coats may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

Information on Permaclear V88VC31 coatings may be obtained by writing to the following address:

Sherwin-Williams Automotive Finishes Corp.  
388 Robins Drive  
Troy, MI 48083  
[www.sherwin-automotive.com](http://www.sherwin-automotive.com)

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sabic Innovative Plastics, Korea	LEXAN LS-1	POLYCARBONATE	111	White #!
	LEXAN LS-2		111C	White #!
	(coated or uncoated)		6162	Red #!
			4158	Yellow #!

www.sabic-ip.com

Coated Sabic Innovative Plastics Nansha, China plastics may only be treated with the following acceptable coatings applied to the molded lens:

#### Coating in Alphabetical Order and Corresponding Manufacturer

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-700, Acryking PH-710 coatings: See Mitsubishi Rayon Co., Ltd.

Fujikura Kasei Hard Coatings

FUJIHARD 2500

FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2,  
 FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3,  
 FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9  
 FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3,  
 FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3,  
 FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2  
 FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7

Fujikura Kasei Coatings

FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, FUJISOFT 2604 coatings: See Fujikura Kasei Co., Ltd.

KUV-1000, KUV-2000 and KUV-3000: See KCC Corporation

LS123: See NB Coatings Inc.

LHP100/LHC100, LHP100/AS4000: See Momentive Performance Materials Inc.

Permaclear V88VC31: See Sherman Williams

PHC 200, PHC587, PHC587B, PHC587C: See Momentive Performance Materials Inc.

SH2, SH-41, SH-50: See Stanley Electric Co., Ltd.

SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000: See Momentive Performance Materials Inc.

UT-2053 hard coat: Nippon Bee Chemical Co., Ltd.

UVHC3000, UHVC3000K, UHVC3000K1 and UVHC3000K-Z: See Momentive Performance Materials Inc.

(Coating information continued on the next page)

UVT200V1, UVT200V2, UVT200V3 and UVT200V5: See Red Spot.

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8: See Red Spot.

### Coating Manufacturer in Alphabetical Order

Information on FUJIHARD 2500, FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3, FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3, FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2, FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7 and FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, and FUJISOFT 2604 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

Note: FUJISOFT 2601 may NOT be used on lenses incorporating a reflex reflector or in front of a reflex reflector.

Note: FUJIHARD HH2566U-series and HH2567U-series for use on clear lenses only

Note: FUJIHARD HH2540U-series, HH2570U-series, HH2561U-series and HH9986U-series is for use on clear LS-2 plastics only

Information on KUV-1000, KUV-2000 and KUV-3000 coating may be obtained by writing to the following address:

KCC Corporation  
83, Mabook-Dong, Giheung-Gu, Yongin-Si  
Gyunggi-Do, Kroea  
[www.kccworld.co.kr](http://www.kccworld.co.kr)

Note: KUV-1000 and KUV-3000 suitable for 6.4mm LS2-111 lenses only.

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-700, Acryking PH-710 coatings may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-chome,  
Minato-ku, Tokyo 108-8506  
Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

NOTE: Acryking PH-350, PH-511, PH-700, PH-710 for use on LS-2 with clear lenses only

(Coating information continued on the next page)

<b><u>MFR.</u></b>	<b><u>TRADE NAME AND FLOW FORMULATION</u></b>	<b><u>TYPE OF RESIN</u></b>	<b><u>NUMBER</u></b>	<b><u>COLOR</u></b>
--------------------	---	-----------------------------	----------------------	---------------------

Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000, PHC 200, PHC587, PHC587B, PHC587C, UVHC3000, UVHC3000K, UVHC3000K1, and UVHC3000K-Z hard coats may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 <a href="http://www.momentive.com">www.momentive.com</a>
---	--

Information on LS123 hard coat may be obtained by writing to the following address:

NB Coatings Inc.  
 2701 East 170TH Street  
 Lansing, IL 60438  
<http://www.nbcoatings.com/>

Information on UT-2053 hard coat may be obtained by writing to the following address:

Nippon Bee Chemical Co., Ltd.  
 2-14-1, Shondai-Ohtani Hirakata-City  
 Osaka, Japan  
[www.nipponbeechemical.jp](http://www.nipponbeechemical.jp)

NOTE: UT- 2053 for use on LS-2 with clear lenses only

Information on UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coating may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
 P.O. Box 418  
 Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

NOTE: Red Spot UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 is only acceptable LS-1, and LS-2,

Information on SH2, SH41 and SH-50 hard coats may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
 2-9-13, Nakameguro, Meguro-KU  
 Tokyo 153, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

Information on Permaclear V88VC31 coatings may be obtained by writing to the following address:

Sherwin-Williams Automotive Finishes Corp.  
 388 Robins Drive  
 Troy, MI 48083  
[www.sherwin-automotive.com](http://www.sherwin-automotive.com)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sabic Innovative Plastics, Singapore	LEXAN LS-1	POLYCARBONATE	111	White #!
	LEXAN LS-1A		111C	White #!
	LEXAN LS-2		111H	White #!
	LEXAN LS-2A		111M	White #!
www.sabic-ip.com	LEXAN LS-3		111S	White #!
	LEXAN LSHF (HIGH FLOW) (coated or uncoated)		112	White #!
			51073	Smoke Grey #!
			71127	Smoke Grey #!
			71194	Smoke Grey #!
(Formerly GE Plastics Singapore)			71274	Smoke Grey #!
			GY3A578T	Smoke Grey #!
			6111	Red #!
			6162	Red #!
			6164	Red #!
			61014	Red #!
			61079	Red #!
			61154	Red #!
			61228	Red #!
			414	Yellow #!
			4135	Yellow #!
			4158	Yellow #!
			4168	Yellow #!
			4169	Yellow #!
			4173	Yellow #!
			4194	Yellow #!
			41105	Yellow #!
			41152	Yellow #!
			YW 5005T	Yellow #!
			21242	Clear Blue #!
			2148	Clear Blue #!

Coated Sabic Innovative Plastics Nansha, China plastics may only be treated with the following acceptable coatings applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-700, Acryking PH-710 coatings: See Mitsubishi Rayon Co., Ltd.

Fujikura Kasei Hard Coatings

FUJIHARD 2500

FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2,

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3,

FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9

FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3,

FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3,

FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2

FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Fujikura Kasei Coatings FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, FUJISOFT 2604 coatings: See Fujikura Kasei Co., Ltd.				
KUV-1000, KUV-2000 and KUV-3000: See KCC Corporation				
LS123: See NB Coatings Inc.				
LHP100/LHC100, LHP100/AS4000: See Momentive Performance Materials Inc.				
Permaclear V88VC31: See Sherman Williams				
PHC 200, PHC587, PHC587B, PHC587C: See Momentive Performance Materials Inc.				
SH2, SH-41, SH-50: See Stanley Electric Co., Ltd.				
SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000: See Momentive Performance Materials Inc.				
UT-2053 hard coat: Nippon Bee Chemical Co., Ltd.				
UVHC3000, UHVC3000K, UHVC3000K1 and UVHC3000K-Z: See Momentive Performance Materials Inc.				
UVT200V1, UVT200V2, UVT200V3 and UVT200V5: See Red Spot.				
UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8: See Red Spot.				

### Coating Manufacturer in Alphabetical Order

Information on FUJIHARD 2500, FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3, FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3, FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2, FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7 and FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, and FUJISOFT 2604 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

Note: FUJISOFT 2601 may NOT be used on lenses incorporating a reflex reflector or in front of a reflex reflector.

Note: FUJIHARD HH2566U-series and HH2567U-series for use on clear lenses only

Note: FUJIHARD HH2540U-series, HH2570U-series, HH2561U-series and HH9986U-series is for use on clear LS-2 plastics only

(Coating information continued on the next page)

Information on KUV-1000, KUV-2000 and KUV-3000 coating may be obtained by writing to the following address:

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

KCC Corporation  
 83, Mabook-Dong, Giheung-Gu, Yongin-Si  
 Gyunggi-Do, Kroea  
[www.kccworld.co.kr](http://www.kccworld.co.kr)

Note: KUV-1000 and KUV-3000 suitable for 6.4mm LS2-111 lenses only.

Acryking F-328, Acryking K-101, Acryking PH-328, Acryking PH-350, Acryking PH-503, Acryking PH-511 or Acryking PH-700, Acryking PH-710 coatings may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
 6-41, Konan 1-chome,  
 Minato-ku, Tokyo 108-8506  
 Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

NOTE: Acryking PH-350, PH-511, PH-700, PH-710 for use on LS-2 with clear lenses only

Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHP470 with AS4700 topcoat, SHC6000, PHC 200, PHC587, PHC587B, PHC587C, UVHC3000, UVHC3000K, UVHC3000K1, and UVHC3000K-Z hard coats may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 <a href="http://www.momentive.com">www.momentive.com</a>
---	--

Information on LS123 hard coat may be obtained by writing to the following address:

NB Coatings Inc.  
 2701 East 170TH Street  
 Lansing, IL 60438  
<http://www.nbcoatings.com/>

Information on UT-2053 hard coat may be obtained by writing to the following address:

Nippon Bee Chemical Co., Ltd.  
 2-14-1, Shondai-Ohtani Hirakata-City  
 Osaka, Japan  
[www.nipponbeechemical.jp](http://www.nipponbeechemical.jp)

NOTE: UT- 2053 for use on LS-2 with clear lenses only

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coating may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

NOTE: Red Spot UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 is only acceptable LS-1, and LS-2,

Information on SH2, SH41 and SH-50 hard coats may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

Information on Permaclear V88VC31 coatings may be obtained by writing to the following address:

Sherwin-Williams Automotive Finishes Corp.  
388 Robins Drive  
Troy, MI 48083  
[www.sherwin-automotive.com](http://www.sherwin-automotive.com)

---

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sam Yang Corporation www.samyang.com	TRIEX 3022L1 TRIEX 3022L2 TRIEX 3022L3 (coated or uncoated)	POLYCARBONATE	100 R112 R212 R312 A115 A212 A307 A412	Clear \$# Red \$ Red \$ Red \$ Yellow \$ Yellow \$ Yellow \$ Yellow \$

Coated Sam Yang Corporation plastics are only acceptable with the coatings listed below when properly applied to the molded lens.

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101, or Acryking PH-503 hard coats: See Mitsubishi Rayon Co., Ltd.

LS123: See NB Coatings Inc.

LHP100/LHC100, LHP100/AS4000: See Momentive Performance Materials Inc.

SHP401/AS4000, SHP401/SHC4002 hard coats: See Momentive Performance Materials Inc.

UVT200, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7 and UVT610V8 coating: See Red Spot

Note: UVT610V series coatings all had less than 7% haze and are designated by the # mark.

#### **Coating Manufacturer in Alphabetical Order**

Information on LHP100/LHC100, LHP100/AS4000, SHP401/AS4000, and SHP401/SHC4002 hard coats may be obtained by writing to the following address:

Momentive Performance Materials Inc.  
260 Hudson River Road  
Waterford, NY 12118  
www.momentive.com

Information on LS123 coating may be obtained by writing to the following address:

NB Coatings Inc.  
2701 East 170TH Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on Mitsubishi Rayon Acryking F-328, Acryking K-101 and Acryking PH-503 coatings may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-chome,  
Minato-ku, Tokyo 108-8506  
Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

Information on UVT200 and UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7 and UVT610V8 coatings may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

Note: UVT610V series coatings all had less than 7% haze and are designated by the # mark.

Note: UVT610V series coatings were tested on Trirex 3022L1 clear only.

---

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Styron Netherlands BV	CALIBRE C303HP-15		30003	Clear \$
	CALIBRE C303HP-22		30003	Clear \$

(Formerly Dow Benelux BV)

Note: CALIBRE 303HP-14 is only to be used on color number TC030004  
CALIBRE 303HP-21 and colour number TC030004

Coated Styron Netherlands BV plastics may only be treated with the following acceptable coatings applied to the molded lens.

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

LS123: See NB Coatings Inc.

SHP401/AS4000: See Momentive Performance Materials Inc.

UVHC3000: See Momentive Performance Materials Inc.

#### **Coating Manufacturer in Alphabetical Order**

Information on SHP401/AS4000 and UVHC3000 hard coat may be obtained by writing to the following address:

Momentive Performance Materials GmbH Building V7 51368 Lverkusen Germany	Momentive Performance Materials Inc. 260 Hudson River Road Waterford, NY 12118 <a href="http://www.momentive.com">www.momentive.com</a>
---	--

Information on LS123 coating may be obtained by writing to the following address:

NB Coatings Inc.  
2701 East 170TH Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sumitomo	SUMIPEX HT	POLYMETHYL	011	Clear
Chemical	SUMIPEX MG	METHACRYLATE	012	Clear
Co., Ltd.	SUMIPEX MH		014	Clear
	SUMIPEX MHF		0151	Clear
www.sumitomo-chem.co.jp	SUMIPEX MHG		0152	Clear
	SUMIPEX MH-EXTRA		0153	Clear
	SUMIPEX MM		0154	Clear
	SUMIPEX MT		0155	Clear
	SUMIPEX TR		0161	Clear
			0162	Clear
Note: SUMIPEX MHR is now known as SUMIPEX MH-EXTRA			0163	Clear
			0164	Clear
			0165	Clear
			418	Red
			418(RR)	Red
			4032	Red
			4052	Red
			4053	Red
			4092	Red
			4152	Red
			4153	Red
			4162	Red
			4172	Red
			4182	Red
			4312	Red
			4313	Red
			4322	Red
			4332	Red
			4342	Red
			4901	Red
			4902	Red
			4903	Red
			4904	Red
			4906	Red
			4911	Red
			4912	Red
			4913	Red
			4915	Red
			3101	Yellow
			3111	Yellow
			3121	Yellow
			3131	Yellow
			3231	Yellow
			3232	Yellow
			3241	Yellow
			3311	Yellow
			3321	Yellow
			3331	Yellow
			3341	Yellow
			3421	Yellow
			3901	Yellow
			3902	Yellow
			3904	Yellow
			3906	Yellow
			3910	Yellow

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sumitomo Chemical Co., Ltd.  www.sumitomo-chem.co.jp	SUMIPEX HT	POLYMETHYL METHACRYLATE	3911	Yellow
	SUMIPEX MG		3914	Yellow
	SUMIPEX MH	3916	Yellow	
	SUMIPEX MHF	3917	Yellow	
	SUMIPEX MHG	3918	Yellow	
	SUMIPEX MH-EXTRA	3925	Yellow	
	SUMIPEX MM	9001	Gray	
	SUMIPEX MT	9002	Gray	
	SUMIPEX TR	9003	Gray	
	Note: SUMIPEX MHR is now known as SUMIPEX MH-EXTRA		9004	Gray
			9005	Gray
		9006	Gray	
		9007	Gray	
		9176	Gray	
		9177	Gray	
		9178	Gray	
		9179	Gray	
		9180	Gray	
		9181	Gray	
		9182	Gray	
		9183	Gray	
		9184	Gray	
		9185	Gray	
		9186	Gray	
	9187	Gray		
	9188	Gray		
	9260	Brown		
	9261	Brown		
	9262	Brown		
	9263	Brown		
	9264	Brown		
	9265	Brown		

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sumitomo	SUMIPEX HT	POLYMETHYL	011	Clear
Chemical	SUMIPEX MG	METHACRYLATE	012	Clear
Singapore	SUMIPEX MH		014	Clear
PTE Ltd.	SUMIPEX MHF		0151	Clear
	SUMIPEX MHG		0152	Clear
www.scs-chem.com.sg	SUMIPEX MH-EXTRA		0153	Clear
	SUMIPEX MM		0154	Clear
	SUMIPEX MT		0155	Clear
	SUMIPEX TR		0161	Clear
			0162	Clear
Note: SUMIPEX MHR is now known as SUMIPEX MH-EXTRA			0163	Clear
			0164	Clear
			0165	Clear
			418	Red
			418(RR)	Red
			4032	Red
			4052	Red
			4053	Red
			4092	Red
			4152	Red
			4153	Red
			4162	Red
			4172	Red
			4182	Red
			4312	Red
			4313	Red
			4322	Red
			4332	Red
			4342	Red
			4901	Red
			4902	Red
			4903	Red
			4904	Red
			4906	Red
			4911	Red
			4912	Red
			4913	Red
			4915	Red
			3101	Yellow
			3111	Yellow
			3121	Yellow
			3131	Yellow
			3231	Yellow
			3232	Yellow
			3241	Yellow
			3311	Yellow
			3321	Yellow
			3331	Yellow
			3341	Yellow
			3421	Yellow
			3901	Yellow
			3902	Yellow
			3904	Yellow
			3906	Yellow

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sumitomo	SUMIPEX HT	POLYMETHYL	3910	Yellow
Chemical	SUMIPEX MG	METHACRYLATE	3911	Yellow
Singapore	SUMIPEX MH		3914	Yellow
PTE., Ltd.	SUMIPEX MHF		3916	Yellow
	SUMIPEX MHG		3917	Yellow
www.scs-chem.com.sg	SUMIPEX MH-EXTRA		3918	Yellow
	SUMIPEX MM		3925	Yellow
	SUMIPEX MT		9001	Gray
	SUMIPEX TR		9002	Gray
			9003	Gray
Note: SUMIPEX MHR is now known as SUMIPEX MH-EXTRA			9004	Gray
			9005	Gray
			9006	Gray
			9007	Gray
			9176	Gray
			9177	Gray
			9178	Gray
			9179	Gray
			9180	Gray
			9181	Gray
			9182	Gray
			9183	Gray
			9184	Gray
			9185	Gray
			9186	Gray
			9187	Gray
			9188	Gray
			9260	Brown
			9261	Brown
			9262	Brown
			9263	Brown
			9264	Brown
			9265	Brown

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sumitomo	SUMIPEX HT	POLYMETHYL	011	Clear
Chemical	SUMIPEX MG	METHACRYLATE	012	Clear
Europe	SUMIPEX MH		014	Clear
S.A./N.V.	SUMIPEX MHF		0151	Clear
	SUMIPEX MHG		0152	Clear
www.sumitomo-chem.be	SUMIPEX MH-EXTRA		0153	Clear
	SUMIPEX MM		0154	Clear
	SUMIPEX MT		0155	Clear
	SUMIPEX TR		0161	Clear
			0162	Clear
Note: SUMIPEX MHR is now known as SUMIPEX MH-EXTRA			0163	Clear
			0164	Clear
			0165	Clear
			418	Red
			418(RR)	Red
			4032	Red
			4052	Red
			4053	Red
			4092	Red
			4152	Red
			4153	Red
			4162	Red
			4172	Red
			4182	Red
			4312	Red
			4313	Red
			4322	Red
			4332	Red
			4342	Red
			4901	Red
			4902	Red
			4903	Red
			4904	Red
			4906	Red
			4911	Red
			4912	Red
			4913	Red
			4915	Red
			3101	Yellow
			3111	Yellow
			3121	Yellow
			3131	Yellow
			3231	Yellow
			3232	Yellow
			3241	Yellow
			3311	Yellow
			3321	Yellow
			3331	Yellow
			3341	Yellow
			3421	Yellow
			3901	Yellow
			3902	Yellow
			3904	Yellow
			3906	Yellow

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sumitomo	SUMIPEX HT	POLYMETHYL	3910	Yellow
Chemical	SUMIPEX MG	METHACRYLATE	3911	Yellow
Europe	SUMIPEX MH		3914	Yellow
S.A./N.V.	SUMIPEX MHF		3916	Yellow
	SUMIPEX MHG		3917	Yellow
www.sumitomo-chem.be	SUMIPEX MH-EXTRA		3918	Yellow
	SUMIPEX MM		3925	Yellow
	SUMIPEX MT		9001	Gray
	SUMIPEX TR		9002	Gray
			9003	Gray
Note: SUMIPEX MHR is now known as SUMIPEX MH-EXTRA			9004	Gray
			9005	Gray
			9006	Gray
			9007	Gray
			9176	Gray
			9177	Gray
			9178	Gray
			9179	Gray
			9180	Gray
			9181	Gray
			9182	Gray
			9183	Gray
			9184	Gray
			9185	Gray
			9186	Gray
			9187	Gray
			9188	Gray
			9260	Brown
			9261	Brown
			9262	Brown
			9263	Brown
			9264	Brown
			9265	Brown

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sumika Stylon Polycarbonate Ltd.	CALIBRE 303-10	POLYCARBONATE	30003	White \$
	CALIBRE 303-30 (coated or uncoated)		30004	White \$
			160039	Red \$
Formerly Sumitomo Dow Ltd.			150038	Yellow \$

www.sspc.com

Coated Sumika Stylon Polycarbonate Limited. plastics are only acceptable with the coatings listed below when properly applied to the molded lens.

#### Coating in Alphabetical Order and Corresponding Manufacturer

LS123: See NB Coatings Inc.

FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7, FUJIHARD HH3035U-3, and FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3: See Fujikura Kasei Co., Ltd.

#### Coating Manufacturer in Alphabetical Order

Information on FUJIHARD HH9986U-N3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7 and FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo, 105-0011  
Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

Information on LS123 coating may be obtained by writing to the following address:

NB Coatings Inc.  
2701 East 170TH Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Sumika Stylon	SD POLYCA™ SD2133V	POLYCARBONATE	AA059	White \$
Polycarbonate Ltd.	SD POLYCA™ SD2143V (Coated only)	POLYCARBONATE	AA087	White \$
Formerly Sumitomo Dow Ltd.				

www.sspc.com

Coated Sumika Stylon Polycarbonate Ltd. plastics are only acceptable with the coatings listed below when properly applied to the molded lens.

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking PH-328 hard coats: See Mitsubishi Rayon Co., Ltd.

#### **Coating Manufacturer in Alphabetical Order**

Information on Mitsubishi Rayon Acryking PH328 coating may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-chome,  
Minato-ku, Tokyo 108-8506  
Japan  
www.mrc.co.jp

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Teijin Chemicals	Panlite L-1225V (coated)	POLYCARBONATE	100-M	Clear &
---------------------	-----------------------------	---------------	-------	---------

www.teijinkasei.co.jp

Coated Teijin Chemicals Panlite L-1225V plastic is only acceptable with the coatings listed below when properly applied to the molded lens.

### Coating in Alphabetical Order and Corresponding Manufacturer

SH-50: See Stanley Electric

### Coating Manufacturer in Alphabetical Order

Information on Stanley Electric SH-50 coating may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-Ku  
Tokyo 153-8636, Japan  
www.stanley.co.jp

Teijin Chemicals	PANLITE L-1225Z	POLYCARBONATE	100	Clear #		
	PANLITE L-1225ZL		100-C	Clear #		
	PANLITE L-1250Z		100-L	Clear		
	(coated or uncoated)		100-K	Clear #		
			100-M	Clear #		
	www.teijinkasei.co.jp				110	Clear #
					1000	Clear #
					1100	Clear #
					1200	Clear #
					1300	Clear #
					1400	Clear #
					200	Red #
					206	Red #
					210	Red #
			216	Red #		
			220	Red #		
			226	Red #		
			230	Red #		
			236	Red #		
		240	Red #			
		246	Red #			
		250	Red #			
		260	Red #			
		270	Red #			
		280	Red #			
		290	Red #			

Color numbers listed for Teijin Chemicals (other than the numbers for above already having suffixes) can have suffixes represented by the following alphabets: -L, -LM, -M, -K

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Teijin Chemicals	PANLITE L-1225Z	POLYCARBONATE	2000	Red #
	PANLITE L-1225ZL		2100	Red #
	PANLITE L-1250Z		2200	Red #
	(coated or uncoated)		2300	Red #
www.teijinkasei.co.jp			2400	Red #
			2500	Red #
Color numbers listed for Teijin Chemicals (other than the numbers for above already having suffixes) can have suffixes represented by the following alphabets: -L, -LM, -M, -K			2600	Red #
			2700	Red #
			2800	Red #
			2900	Red #
			300	Yellow #
			310	Yellow #
			320	Yellow #
			330	Yellow #
			340	Yellow #
			350	Yellow #
			360	Yellow #
			370	Yellow #
			380	Yellow #
			390	Yellow #
			400	Yellow #
			410	Yellow #
			420	Yellow #
			430	Yellow #
			440	Yellow #
			3000	Yellow #
		3100	Yellow #	
		3200	Yellow #	
		3300	Yellow #	
		3400	Yellow #	
		3500	Yellow #	
		3600	Yellow #	
		3700	Yellow #	
		3800	Yellow #	
		3900	Yellow #	
		7000	Gray #	
		7100	Gray #	
		7200	Gray #	
		7300	Gray #	
		7400	Gray #	
		7500	Gray #	
		7600	Gray #	
		7700	Gray #	
		7800	Gray #	
		7900	Gray #	

Coated Teijin Chemicals Plastics are only acceptable with the coatings listed below when properly applied to the molded lens.

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

**Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101S, Acryking PH-328, Acryking PH-511, Acryking PH-710, Acryking PH-720, Acryking PH-750 and Acryking PH-800: See Mitsubishi Rayon

FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2: See Fujikura Kasei, Co., Ltd.

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3: See Fujikura Kasei, Co., Ltd.

FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3: See Fujikura Kasei, Co., Ltd.

FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3: See Fujikura Kasei, Co., Ltd.

FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2: See Fujikura Kasei, Co., Ltd.

FUJIHARD HH9986U-3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7: See Fujikura Kasei, Co., Ltd.

FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9: See Fujikura Kasei, Co., Ltd.

FUJIHARD HH2605, FUJIHARD HH2610, FUJIHARD HH3176: See Fujikura Kasei, Co., Ltd.

LS123 coating: See NB Coatings Inc.

SH-41 and SH-50: See Stanley Electric

SM710, SM115 hard coat: See Teijin Chemicals Ltd.

UVHC3000, UVHC3000K1, UVHC3000K-Z : Momentive Performance Materials Inc.

UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8: See Red Spot.

**Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3, FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3, FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2, FUJIHARD HH9986U-3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD HH2605, FUJIHARD HH2610, and FUJIHARD HH3176 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
 6-15 Shibakoen 2-Chome  
 Minato-Ku, Tokyo 105-0011  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

NOTE: Fujihard coatings were tested on Panlite 100 Clear only

(Coating information continued on the next page)

<b><u>MFR.</u></b>	<b><u>TRADE NAME AND FLOW FORMULATION</u></b>	<b><u>TYPE OF RESIN</u></b>	<b><u>NUMBER</u></b>	<b><u>COLOR</u></b>
--------------------	---	-----------------------------	----------------------	---------------------

Information on Mitsubishi Rayon Acryking F-328, Acryking K-101S, Acryking PH-328, Acryking PH-511, Acryking PH-710, Acryking PH-720, Acryking PH-750 and Acryking PH-800 coating may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-chome,  
Minato-ku, Tokyo 108-8506  
Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

Note: Acryking F-328, Acryking K-101S, Acryking PH-328, Acryking PH-511, Acryking PH-710, Acryking PH-720, Acryking PH-750 and Acryking PH-800 were tested on clear L-1225Z only.

Information on UVHC3000 UVHC3000K1, UVHC3000K-Z hard coat may be obtained by writing to the following address:

Momentive Performance Materials Inc.  
260 Hudson River Road  
Waterford, NY 12118  
[www.momentive.com](http://www.momentive.com)

Information on LS123 coating may be obtained by writing to the following address:

NB Coatings Inc.  
2701 East 170TH Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>

Information on Red Spot UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coatings may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

Information on Stanley Electric SH-41 and SH-50 coating may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153-8636, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

Information on SM710 coating or SM115 hard coat may be obtained by writing to the following address:

Teijin Chemicals Ltd.  
Plastics Sales Division  
Kasumigaseki Common Gate West Tower  
2-1, Kasumigaseki 3-chome,  
Chiyoda-ku, Tokyo, 100-8585

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
	Japan www.teijinkasei.co.jp			

Teijin Polycarbonate China Ltd.	Panlite L-1225V (coated)	POLYCARBONATE	100-M	Clear &
---------------------------------	--------------------------	---------------	-------	---------

www.teijinkasei.co.jp

Coated Teijin Polycarbonate China Panlite L-1225V 100-M plastic is only acceptable with the coatings listed below when properly applied to the molded lens.

### Coating in Alphabetical Order and Corresponding Manufacturer

SH-50: See Stanley Electric

### Coating Manufacturer in Alphabetical Order

Information on Stanley Electric SH-50 coating may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153-8636, Japan  
www.stanley.co.jp

Teijin Polycarbonate China, Ltd.	PANLITE L-1225Z	POLYCARBONATE	100	Clear #
	PANLITE L-1225ZL		100-C	Clear #
	PANLITE L-1250Z		100-L	Clear #
	(coated or uncoated)		100-K	Clear #
www.teijinkasei.co.jp			100-M	Clear #
			110	Clear #
Color numbers listed for Teijin Polycarbonate China, Ltd. (other than the numbers for above already having suffixes) can have suffixes represented by the following alphabets: -L, -LM, -M, -K			1000	Clear #
			1100	Clear #
			1200	Clear #
			1300	Clear #
			1400	Clear #
			200	Red #
			206	Red #
			210	Red #
			216	Red #
			220	Red #
			226	Red #
			230	Red #
			236	Red #
			240	Red #
			246	Red #
			250	Red #
			260	Red #

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Teijin	PANLITE L-1225Z	POLYCARBONATE	270	Red #
Polycarbonate	PANLITE L-1225ZL		280	Red #
China, Ltd.	PANLITE L-1250Z (coated or uncoated)			

www.teijinkasei.co.jp

Color numbers listed for Teijin Polycarbonate China, Ltd. (other than the numbers for above already having suffixes) can have suffixes represented by the following alphabets: -L, -LM, -M, -K

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Teijin	PANLITE L-1225Z	POLYCARBONATE	290	Red #
Polycarbonate	PANLITE L-1225ZL		2000	Red #
China, Ltd.	PANLITE L-1250Z		2100	Red #
	(coated or uncoated)		2200	Red #
www.teijinkasei.co.jp			2300	Red #
			2400	Red #
Color numbers listed for Teijin Polycarbonate China Ltd. (other than the numbers for above already having suffixes) can have suffixes represented by the following alphabets: -L, -LM, -M, -K			2500	Red #
			2600	Red #
			2700	Red #
			2800	Red #
			2900	Red #
			300	Yellow #
			310	Yellow #
			320	Yellow #
			330	Yellow #
			340	Yellow #
			350	Yellow #
			360	Yellow #
			370	Yellow #
			380	Yellow #
			390	Yellow #
			400	Yellow #
			410	Yellow #
			420	Yellow #
			430	Yellow #
			440	Yellow #
			3000	Yellow #
			3100	Yellow #
			3200	Yellow #
			3300	Yellow #
			3400	Yellow #
			3500	Yellow #
			3600	Yellow #
			3700	Yellow #
			3800	Yellow #
			3900	Yellow #
			7000	Gray #
			7100	Gray #
			7200	Gray #
			7300	Gray #
			7400	Gray #
			7500	Gray #
			7600	Gray #
			7700	Gray #
			7800	Gray #
			7900	Gray #

Coated Teijin Polycarbonate China Ltd. plastics are only acceptable with the coatings listed below when properly applied to the molded lens.

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

**Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101S, Acryking PH-328, Acryking PH-511, Acryking PH-710, Acryking PH-720, Acryking PH-750 and Acryking PH-800: See Mitsubishi Rayon

FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2: See Fujikura Kasei, Co., Ltd.

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3: See Fujikura Kasei, Co., Ltd.

FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3: See Fujikura Kasei, Co., Ltd.

FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3: See Fujikura Kasei, Co., Ltd.

FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2: See Fujikura Kasei, Co., Ltd.

FUJIHARD HH9986U-3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7: See Fujikura Kasei, Co., Ltd.

FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9: See Fujikura Kasei, Co., Ltd.

FUJIHARD HH2605, FUJIHARD HH2610, FUJIHARD HH3176: See Fujikura Kasei, Co., Ltd.

LS123: See NB Coatings Inc.

SH-41 and SH-50: See Stanley Electric

SM710, SM115 hard coat: See Teijin Chemicals Ltd.

UVHC3000 UVHC3000K1, UVHC3000K-Z: Momentive Performance Materials Inc.

UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8: See Red Spot.

**Coating Manufacturer in Alphabetical Order**

Information on FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3, FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3, FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2, FUJIHARD HH9986U-3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD HH2605, FUJIHARD HH2610, and FUJIHARD HH3176 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

NOTE: Fujihard coatings were tested on Panlite 100 Clear only

(Coating information continued on the next page)

<b><u>MFR.</u></b>	<b><u>TRADE NAME AND FLOW FORMULATION</u></b>	<b><u>TYPE OF RESIN</u></b>	<b><u>NUMBER</u></b>	<b><u>COLOR</u></b>
--------------------	---	-----------------------------	----------------------	---------------------

Information on Mitsubishi Rayon Acryking F-328, Acryking K-101S, Acryking PH-328, Acryking PH-511, Acryking PH-710, Acryking PH-720, Acryking PH-750 and Acryking PH-800 coating may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-chome,  
Minato-ku, Tokyo 108-8506  
Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

Note: Acryking F-328, Acryking K-101S, Acryking PH-328, Acryking PH-511, Acryking PH-710, Acryking PH-720, Acryking PH-750 and Acryking PH-800 were tested on clear L-1225z only.

Information on Information on UVHC3000 UVHC3000K1, UVHC3000K-Z hard coat may be obtained by writing to the following address:

Momentive Performance Materials Inc.  
260 Hudson River Road  
Waterford, NY 12118  
[www.momentive.com](http://www.momentive.com)

Information on LS123 coating may be obtained by writing to the following address:

NB Coatings Inc.  
2701 East 170TH Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>

Information on Red Spot UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coatings may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

Information on Stanley Electric SH-41 and SH-50 coating may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153-8636, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

Information on SM710 coating or SM115 hard coat may be obtained by writing to the following address:

Teijin Chemicals Ltd.  
Plastics Sales Division  
Kasumigaseki Common Gate West Tower  
2-1, Kasumigaseki 3-chome,  
Chiyoda-ku, Tokyo, 100-8585  
Japan  
[www.teijinkasei.co.jp](http://www.teijinkasei.co.jp)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Teijin Polycarbonate Singapore PTE Ltd.	Panlite L-1225V (coated)	POLYCARBONATE	100-m	Clear &
www.teijinkasei.co.jp				

Coated Teijin Polycarbonate Singapore PTE Panlite L-1225V 100-M plastic is only acceptable with the coatings listed below when properly applied to the molded lens.

### Coating in Alphabetical Order and Corresponding Manufacturer

SH-50: See Stanley Electric

### Coating Manufacturer in Alphabetical Order

Information on Stanley Electric SH-50 coating may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153-8636, Japan  
www.stanley.co.jp

Teijin	PANLITE L-1225Z	POLYCARBONATE	100	Clear #
Polycarbonate	PANLITE L-1225ZL		100-C	Clear #
Singapore	PANLITE L-1250Z		100-L	Clear #
PTE Ltd.	(coated or uncoated)		100-K	Clear #
			100-M	Clear #
www.teijinkasei.co.jp			110	Clear #
			1000	Clear #
Color numbers listed for Teijin Polycarbonate Singapore PTE Ltd.			1100	Clear #
(other than the numbers for above already having suffixes)			1200	Clear #
can have suffixes represented by the following alphabets: -L, -LM, -M, -K			1300	Clear #
			1400	Clear #
			200	Red #
			206	Red #
			210	Red #
			216	Red #
			220	Red #
			226	Red #
			230	Red #
			236	Red #
			240	Red #
			246	Red #
			250	Red #
			260	Red #
			270	Red #
			280	Red #
			290	Red #
			2000	Red #

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Teijin	PANLITE L-1225Z	POLYCARBONATE	2100	Red #
Polycarbonate	PANLITE L-1225ZL		2200	Red #
Singapore	PANLITE L-1250Z		2300	Red #
PTE Ltd.	(coated or uncoated)		2400	Red #
			2500	Red #
www.teijinkasei.co.jp			2600	Red #
			2700	Red #
Color numbers listed for Teijin Polycarbonate Singapore PTE Ltd.			2800	Red #
(other than the numbers for above already having suffixes) can			2900	Red #
have suffixes represented by the following alphabets: -L, -LM, -M, -K			300	Yellow #
			310	Yellow #
			320	Yellow #
			330	Yellow #
			340	Yellow #
			350	Yellow #
			360	Yellow #
			370	Yellow #
			380	Yellow #
			390	Yellow #
			400	Yellow #
			410	Yellow #
			420	Yellow #
			430	Yellow #
			440	Yellow #
			3000	Yellow #
			3100	Yellow #
			3200	Yellow #
			3300	Yellow #
			3400	Yellow #
			3500	Yellow #
			3600	Yellow #
			3700	Yellow #
			3800	Yellow #
			3900	Yellow #
			7000	Gray #
			7100	Gray #
			7200	Gray #
			7300	Gray #
			7400	Gray #
			7500	Gray #
			7600	Gray #
			7700	Gray #
			7800	Gray #
			7900	Gray #

Coated Teijin Polycarbonate Singapore PTE Ltd. are only acceptable when treated with the following coatings applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101S, Acryking PH-328, Acryking PH-511, Acryking PH-710, Acryking PH-720, Acryking PH-750 and Acryking PH-800: See Mitsubishi Rayon

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
	FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2:			See Fujikura Kasei, Co., Ltd.
	FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3:			See Fujikura Kasei, Co., Ltd.
	FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3:			See Fujikura Kasei, Co., Ltd.
	FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3:			See Fujikura Kasei, Co., Ltd.
	FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2:			See Fujikura Kasei, Co., Ltd.
	FUJIHARD HH9986U-3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7:			See Fujikura Kasei, Co., Ltd.
	FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9:			See Fujikura Kasei, Co., Ltd.
	FUJIHARD HH2605, FUJIHARD HH2610, FUJIHARD HH3176:			See Fujikura Kasei, Co., Ltd.
	LS123:			See NB Coatings Inc.
	SH-41 and SH-50:			See Stanley Electric
	SM710, SM115 hard coat:			See Teijin Chemicals Ltd.
	UVHC3000 UVHC3000K1, UVHC3000K-Z:			Momentive Performance Materials Inc.
	UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8:			See Red Spot.

### Coating Manufacturer in Alphabetical Order

Information on FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2566U, FUJIHARD HH2566U-1, FUJIHARD HH2566U-2, FUJIHARD HH2566U-3, FUJIHARD HH2567U, FUJIHARD HH2567U-1, FUJIHARD HH2567U-2, FUJIHARD HH2567U-3, FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2, FUJIHARD HH9986U-3, FUJIHARD HH9986U-N5, FUJIHARD HH9986U-N7, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD HH2605, FUJIHARD HH2610, and FUJIHARD HH3176 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

NOTE: Fujihard coatings were tested on Panlite 100 Clear only

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on Mitsubishi Rayon Acryking F-328, Acryking K-101S, Acryking PH-328, Acryking PH-511, Acryking PH-710, Acryking PH-720, Acryking PH-750 and Acryking PH-800 coating may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-chome,  
Minato-ku, Tokyo 108-8506  
Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

Note: Acryking F-328, Acryking K-101S, Acryking PH-328, Acryking PH-511, Acryking PH-710, Acryking PH-720, Acryking PH-750 and Acryking PH-800 were tested on clear L-1225z only.

Information on UVHC3000 UVHC3000K1, and UVHC3000K-Z hard coat may be obtained by writing to the following address:

Momentive Performance Materials Inc.  
260 Hudson River Road  
Waterford, NY 12118  
[www.momentive.com](http://www.momentive.com)

Information on LS123 coating may be obtained by writing to the following address:

NB Coatings Inc.  
2701 East 170TH Street  
Lansing, IL 60438  
<http://www.nbcoatings.com/>

Information on Red Spot UVT200V1, UVT200V2, UVT200V3, UVT200V5, UVT610V1, UVT610V2, UVT610V3, UVT610V4, UVT610V5, UVT610V6, UVT610V7, and UVT610V8 coatings may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

Information on Stanley Electric SH-41 and SH-50 coating may be obtained by writing to the following address:

Stanley Electric Co., Ltd.  
2-9-13, Nakameguro, Meguro-KU  
Tokyo 153-8636, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

Information on SM710 coating or SM115 hard coat may be obtained by writing to the following address:

Teijin Chemicals Ltd.  
Plastics Sales Division  
Kasumigaseki Common Gate West Tower  
2-1, Kasumigaseki 3-chome,  
Chiyoda-ku, Tokyo, 100-8585  
Japan  
[www.teijinkasei.co.jp](http://www.teijinkasei.co.jp)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Thai Polycarbonate Co., Ltd.	IUPILON ML-100	POLYCARBONATE	001	Clear \$
	IUPILON ML-200		0001	Clear \$
	IUPILON ML-300		R591A	Clear
	IUPILON ML-400		R591B	Clear
			R591S	Clear
			101	Red \$
			102	Red \$
			103	Red \$
			104	Red \$
			1001	Red \$
			1002	Red \$
			301	Yellow \$
			3001	Yellow \$

Coated Thai Polycarbonate Co., Ltd. Iupilon ML-300 Plastics are only acceptable when coated with the following coating applied to the molded lens:

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking F-328, Acryking K-101-S, Acryking PH-220, Acryking PH-328, Acryking PH-700, Acryking PH-720 and Acryking PH-800: See Mitsubishi Rayon

FUJIHARD HH25401U, HH2540U-1, HH2540U-2: See Fujikura Kasei.

FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2561U-3: See Fujikura Kasei

FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9: See Fujikura Kasei

FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2: See Fujikura Kasei

SH41, SH-50: See Stanley Electric.

#### **Coating Manufacturer in Alphabetical Order**

Information on:

FUJIHARD HH2540U, FUJIHARD HH2540U-1, FUJIHARD HH2540U-2, FUJIHARD HH2551U, FUJIHARD HH2551U-1, FUJIHARD HH2551U-2, FUJIHARD HH2551U-3, FUJIHARD HH2561U-6, FUJIHARD HH2561U-7, FUJIHARD HH2561U-8, FUJIHARD HH2561U-9, FUJIHARD HH2570U, FUJIHARD HH2570U-1, FUJIHARD HH2570U-2 coatings may be obtained by writing to the following address:

Fujikura Kasei Co., Ltd.  
6-15 Shibakoen 2-Chome  
Minato-Ku, Tokyo 105-0011  
Japan  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

Note: Fujihard HH2540 series, HH2551U series, HH2561 series and HH2570U series tested on ML-300 clear only

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

Information on Mitsubishi Rayon Mitsubishi Rayon Acryking F-328, Acryking K-101-S, Acryking PH-220, Acryking PH-328, Acryking PH-700, Acryking PH-720 and Acryking PH-800 coatings may be obtained by contacting the following company:

Mitsubishi Rayon Co., Ltd.  
 6-41, Konan 1-chome,  
 Minato-ku, Tokyo 108-8506  
 Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

Note: Acryking PH-700, Acryking PH-720 and Acryking PH-800 were tested on clear ML-300 only.

Information on Stanley Electric SH-41 and SH-50 hard coats may be obtained by contacting the following company:

Stanley Electric Co., Ltd.  
 2-9-13, Nakameguro, Meguro-KU  
 Tokyo 153-8636, Japan  
[www.stanley.co.jp](http://www.stanley.co.jp)

NOTE: SH-41 may be used be used in front of a reflex reflector. Material would have code Q

NOTE: SH-50 may not be used in front of a reflex reflector. Material would have code \$

NOTE: Coated Thai Polycarbonate Co. Ltd. Iupilon ML-400 plastics are only acceptable when treated with Stanley Electric SH-41 hard coat applied to the molded lens.

---

Thai Polycarbonate Co., Ltd	IUPIILON ML-100R	POLYCARBONATE	001	Clear \$
	IUPIILON ML-200R		105	Red \$
	IUPIILON ML-300R		302	Yellow \$
	IUPIILON ML-400R		501	Gray Smoke \$
	IUPIILON ML-500R (coated or uncoated)			

### Coating in Alphabetical Order and Corresponding Manufacturer

Coated Thai Polycarbonate Co. Ltd. Plastics are only acceptable with the coatings listed below when properly applied to the molded lens.

IUPIILON UV: See Mitsubishi Engineering Plastics Corp.

### Coating Manufacturer in Alphabetical Order

Information on IUPIILON UV coat may be obtained by writing to the following address:

Mitsubishi Engineering Plastics Corp.  
 Plastics Sales Department  
 5-2, Marunouchi 2-Chome  
 Chiyoda-KU, Tokyo, Japan  
[www.m-ep.co.jp](http://www.m-ep.co.jp)

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Unigel Plastics	AC-ACRIGEL	POLYMETHYL METHACRYLATE	DH-01	Clear
	CR-ACRIGEL		DH-207	Red
	FW-ACRIGEL		DH-209	Red
	MP-ACRIGEL		DH-111	Yellow
(Formerly Resarbras da Bahia S.A)				
Unigel Plastics  Formerly Polycarbonatos Do Brasil and Resarbras Da Bahia	DUROLON V-1900 DUROLON V-2200	POLYCARBONATE	C901	Clear (See note)
			C902	Clear (See note)
	C903		Clear (See note)	
	R901		Red (See note)	
	R902		Red (See note)	
	R903		Red (See note)	
	R904		Red (See note)	
	R905		Red (See note)	
	Y901		Yellow (See note)	
	Y902		Yellow (See note)	
	Y903		Yellow (See note)	
	Y904		Yellow (See note)	
	Y905		Yellow (See note)	

Coated Unigel Plastics plastics are only acceptable with the coatings listed below when properly applied to the molded lens.

NOTE: Uncoated V1900 is only acceptable for thickness of 6.4mm

NOTE: V-1900 with UVHC300 is only acceptable for use in a lens with, or in front of, a reflex reflector for the 6.4mm thickness

NOTE: V-1900 with UVHC300 is acceptable for use in a lens without a reflex reflector for any thickness

NOTE: V-1900 with UVT200 is only acceptable for use in a lens with, or in front of, a reflex reflector for the 1.6mm thickness

NOTE: V-1900 with UVT200 is acceptable for use in a lens without a reflex reflector for any thickness

Uncoated V2200 is only acceptable for thicknesses of 3.2 to 6.4 mm

NOTE: V-2200 with UVHC 3000 is acceptable for any use on any lamp for all thicknesses

NOTE: V-2200 with UVT200 is only acceptable for use for a lens with, or in front of, a reflex reflector in the 3.2mm thickness.

NOTE: V-2200 with UVT200 is acceptable for use a lens without reflex reflectors for all thicknesses.

#### **Coating in Alphabetical Order and Corresponding Manufacturer**

Acryking K-101: See Mitsubishi Rayon Co., Ltd.

Tarfloncoat 101, and Tarfloncoat 201: See Idemitsu Kosan Co., Ltd.

(Coating information continued on the next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

UVHC3000: See Momentive Performance Materials, Inc.

UVT200V1, UVT200V2, UVT200V3 and UVT200V5: See Red Spot.

#### **Coating Manufacturer in Alphabetical Order**

Information on Tarfloncoat 101 and Tarfloncoat 201 coatings may be obtained by writing to the following address:

Idemitsu Kosan Co., Ltd.  
1-1, Marunochi 3-Chome, Chiyoda-KU  
Tokyo 100, Japan  
[www.ipc.idemitsu.co.jp](http://www.ipc.idemitsu.co.jp)

Information on Mitsubishi Rayon Acryking K-101 coating may be obtained by writing to the following address:

Mitsubishi Rayon Co., Ltd.  
6-41, Konan 1-chome,  
Minato-ku, Tokyo 108-8506  
Japan  
[www.mrc.co.jp](http://www.mrc.co.jp)

Information on UVHC3000 hard coat may be obtained by writing to the following address:

Momentive Performance Materials Inc.  
260 Hudson River Road  
Waterford, NY 12118  
[www.momentive.com](http://www.momentive.com)

Information on UVT200V1, UVT200V2, UVT200V3 and UVT200V5 coatings may be obtained by writing to the following address:

Red Spot Paint & Varnish Co., Inc.  
P.O. Box 418  
Evansville, IN 47703-0418  
[www.redspot.com](http://www.redspot.com)

NOTE: UVT200 not suitable for use in front of a reflex reflector.

---

---

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Unitika	U-POLYMER P-1001	POLYARYLATE		Clear
Ltd.	U-POLYMER P-1001A		1010	Clear
	U-POLYMER P-1001S		2403	Red
www.unitika.co.jp	U-POLYMER P-3001S		2410	Red
			5-2094	Red
			10-2051	Red
			3071	Yellow
			3301	Yellow
			3401	Yellow
			3410	Yellow
			4410	Yellow
NOTE: 5050 Selective Yellow not to be used as a reflex reflector or in front of a reflex reflector.			5-3091	Yellow
			05-3060	Yellow
			10-4032	Yellow
			050-3070	Yellow
			079-3070	Yellow
			P-1001A 5050	Selective Yellow

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
Wiscom Engineering Plastic (WUXI) Co., Ltd.	WEG-930	POLYMETHYL METHACRYLATE		Clear
	WEH-910		4001	Red
	WIG-840		4002	Red
	WIH-830		4006	Red
			4009	Red
			40010	Red
			40020	Red
			40030	Red
			40040	Red
			40050	Red
			40070	Red
			2001	Yellow
			20010	Yellow
			20020	Yellow
			20030	Yellow
			20040	Yellow
			30010	Yellow
	30040	Yellow		
	8001	Grey		

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
-------------	--	----------------------	---------------	--------------

## INDEX OF COMPANIES AND MATERIALS

		IUPILON, 50, 53, 130		
	<b>A</b>		<b>K</b>	
ACRIGEL, 132			Kuraray Co., LTD, 42	
ACRYPET, 33, 35, 36, 56, 57, 58, 59, 62, 63, 64, 65, 66, 67, 72, 73, 74				
ACRYPET VH, 31			<b>L</b>	
ACRYREX, 29			LEXAN, 75, 79, 83, 87, 91, 95, 99, 102	
ALTUGLAS, 1, 2, 3, 4			LG Chem, Ltd., 45	
APEC, 9, 15, 22			Lucite International (U.K.), 47, 48	
Appendix A			LUCRYL, 71	
Federal Standard and Notable Interpretation Documents Regarding Plastics., 138			LUPOY, 45	
Arkema Inc. Altuglas Division, 1				
Arkema Italia Altuglas Division, 4			<b>M</b>	
Arkema Korea Altuglas Division, 5			MAKROLON, 11, 18	
Asahi Chemical, 6			MEP Europe BV, 49	
	<b>B</b>		Mitsubishi Engineering Plastics, 50	
Bayer MaterialScience AG (Europe), 9			Mitsubishi Rayon, 56	
Bayer MaterialScience LLC, 15			Mitsubishi Rayon Polymer Nanton Co., Ltd., 62	
Bayer Materialscience Ltd. (Asia Pacific), 25				
	<b>C</b>		<b>N</b>	
CALIBRE, 108, 115			Nantong Rayon Chemical Co., Ltd., 65	
CEVIAN, 32			Nippon Steel Chemical Co., Ltd., 68	
Chimei Corporation, 29			NOVAREX, 55	
Chimei Corporation Zhenjiang China, 29				
CLEARLAC, 61			<b>P</b>	
	<b>D</b>		PANLITE, 117, 118, 121, 122, 126	
Daesan MMA Corp., 31			PARAPET, 42, 44	
Daicel Polymer Ltd., 32			Plaskolite Inc., 69	
DELMORE, 6			PLEXIGLAS, 1, 2, 3, 37	
DELPET, 6, 7			POLYARYLATE, 134	
DIAKON, 47, 48			POLYMETHACRYLIC ANHYDRIDE ACRYLIC, 6	
Diapolyacrylate Co., Ltd., 33				
DUROLON, 132			<b>Q</b>	
	<b>E</b>		Quinn Acryl, 71	
ESTYRENE, 68			Quinn Plastics GmbH, 71	
Evonik Cyro LLC., 37				
Evonik Degussa China, 37			<b>R</b>	
Evonik Röhm GmbH, 37			Resarbras da Bahia S.A., 132	
	<b>F</b>		ROHAGLAS, 37	
Formosa Idemitsu Petrochemical Corp., 39			ROHAGUM, 37	
	<b>I</b>		Ryoko Co., Ltd., 72	
Idemitsu Kosan Co., Ltd., 40				
IMPLEX, 3			<b>S</b>	
			Sabic Innovative Plastics Australia, 79	
			Sabic Innovative Plastics Europe, 91	
			Sabic Innovative Plastics Japan, 95	
			Sabic Innovative Plastics Korea, 99	
			Sabic Innovative Plastics Nahsha China, 83	
			Sabic Innovative Plastics Shanghai China, 87	

Sabic Innovative Plastics Singapore, 102  
Sabic Innovative Plastics USA, 75  
Sam Yang Corporation, 106  
SD POLYCA™, 116  
SHINKOLITE, 56, 57, 58, 59, 65, 66, 67  
STYLAC, 7  
STYRENE/ACRYLONITRILE COPOLYMER, 7, 8, 32  
Styron Netherlands BV, 108  
Sumika Stylon Polycarbonate Limited., 115  
SUMIPEX, 109, 110, 111, 112, 113, 114  
Sumitomo Chemical Co., Ltd., 109  
Sumitomo Chemical Europe S.A./N.V., 113  
Sumitomo Chemical Singapore PTE Co., Ltd., 111

## **T**

TARFLON, 39, 40, 41  
Teijin Chemicals, 117  
Teijin Polycarbonate China, Ltd., 121

Teijin Polycarbonate Singapore PTE Ltd., 126  
Thai Polycarbonate Co., Ltd., 130  
TRIREX, 106

## **U**

Unigel Plastics, 132  
Unitika Ltd., 134  
U-POLYMER, 134

## **W**

Wiscom Engineering Plastic (WUXI), 135  
Wonderlite PC-110L, 29

## **X**

XANTAR, 49

**§ 571.108**

**49 CFR Ch. V (10–1–08 Edition)**

S5.1.2 Plastic materials used for optical parts such as lenses and reflectors shall conform to SAE Recommended Practice J576 JUL91, except that:

(a) Plastic lenses (other than those incorporating reflex reflectors) used for inner lenses or those covered by another material and not exposed directly to sunlight shall meet the requirements of paragraphs 3.3 and 4.2 of SAE J576 JUL91 when covered by the outer lens or other material;

(b) After the outdoor exposure test, the haze and loss of surface luster of plastic materials (other than those incorporating reflex reflectors) used for outer lenses shall not be greater than 30 percent haze as measured by ASTM D 1003–92, *Haze and Luminous Transmittance of Transparent Plastic*;

(c) After the outdoor exposure test, plastic materials used for reflex reflectors and for lenses used in front of reflex reflectors shall not show surface deterioration, crazing, dimensional changes, color bleeding, delamination, loss of surface luster, or haze that exceeds 7 percent as measured under ASTM D 1003–92.

(d) The thickness of the test specimens specified in paragraph 3.2.2 of SAE J576 JUL91 may vary by as much as  $\pm 0.25$  mm.

(e) After exposure to the heat test as specified in subparagraph (f) of this paragraph, and after cooling to room ambient temperature, a test specimen shall show no change in shape and general appearance discernable to the naked eye when compared with an unexposed specimen. The trichromatic coefficients of the samples shall conform to the requirements of SAE J578c, *Color Specification for Electric Signal Lighting Devices*, February 1977.

(f) Two samples of each thickness of each plastic material are used in the heat test. Each sample is supported at the bottom, with at least 51 mm. of the sample above the support, in the vertical position in such a manner that, on each side, the minimum uninterrupted area of exposed surface is not less than 3225 sq. mm. The samples are placed for two hours in a circulating air oven at  $79 \pm 3$  degrees C.

(g) All outdoor exposure tests shall be 3 years in duration, whether the material is exposed or protected. Accelerated weathering procedures are not permitted.

## Excerpts from Section 14 from FMVSS 108

S14.1.2 *Plastic optical materials.* All plastic materials used for optical parts such as lenses and reflectors on lamps or reflective devices required or allowed by this standard must conform to the material test requirements of S14.4.2.

S14.1.3 All coatings used on optical materials must have added to their formulations an optical brightener, whose presence is detectable by ultraviolet light, to aid in testing for their presence. Other equivalent industry accepted methods may be used as an alternative

S14.4.2 Plastic optical materials tests. Accelerated weathering procedures are not permitted.

S14.4.2.1 Samples.

S14.4.2.1.1 Samples of materials shall be injection molded into polished metal molds to produce test specimens with two flat and parallel faces. Alternative techniques may be used to produce equivalent specimens.

S14.4.2.1.2 Test specimens shape may vary, but each exposed surface must contain a minimum uninterrupted area of 32 sq cm.

S14.4.2.1.3 Samples must be furnished in thicknesses of  $1.6 \pm 0.25$  mm,  $2.3 \pm 0.25$  mm,  $3.2 \pm 0.25$  mm, and  $6.4 \pm 0.25$  mm.

S14.4.2.1.4 All samples must conform to the applicable color test requirement of this standard prior to testing.

S14.4.2.1.5 A control sample, kept properly protected from influences which may change its appearance and properties of each thickness, must be retained.

S14.4.2.2 Outdoor exposure test.

S14.4.2.2.1 Outdoor exposure tests of 3 years in duration must be made on samples of all materials, including coated and uncoated versions, used for optical parts of devices covered by this standard. Tests are to be conducted in Florida and Arizona.

S14.4.2.2.2 Concentrations of polymer components and additives used in plastic materials may be changed without outdoor exposure testing provided the changes are within the limits of composition represented by higher and lower concentrations of these polymer components and additives previously tested to this section and found to meet its requirements.

S14.4.2.2.3 Procedure.

S14.4.2.2.3.1 One sample of each thickness of each material must be mounted at each exposure site so that at least a minimum uninterrupted area of 32 sq cm of the exposed

upper surface of the sample is at an angle of  $45^\circ$  to the horizontal facing south. The sample must be mounted in the open no closer than 30 cm (11.8 in) to its background.

S14.4.2.2.3.2 During the exposure time the samples must be cleaned once every three months by washing with mild soap or detergent and water, and then rinsing with distilled water. Rubbing must be avoided.

S14.4.2.2.4 Performance requirements. Plastic lenses, other than those incorporating reflex reflectors, used for inner lenses or those covered by another material and not exposed directly to sunlight must meet the optical material test requirements when covered by the outer lens or other material.

S14.4.2.2.4.1 After completion of the outdoor exposure test the haze and loss of surface luster as measured by ASTM 1003-92, Haze and Luminous Transmittance of Transparent Plastic, (incorporated by reference, see 571.108 S5.2 of this title) must not be greater than:

(a) 30% for materials used for outer lenses, other than those incorporating reflex reflectors;  
(b) 7% for materials used for reflex reflectors and lenses used in front of reflex reflectors.

S14.4.2.2.4.2 After completion of the outdoor exposure test materials used for headlamp lenses must show no deterioration.

S14.4.2.2.4.3 After completion of the outdoor exposure test all materials, when compared with the unexposed control samples, must not show physical changes affecting performance such as color bleeding, delamination, crazing, or cracking. Additionally materials used for reflex reflectors and lenses used in front of reflex reflectors must not show surface deterioration or dimensional changes.

S14.4.2.2.4.4 After completion of the outdoor exposure test all materials, when compared with the unexposed control samples, must not have their luminous transmittance accordance with ASTM E 308-66 (1973), Spectrophotometry and

Description of Color in CIE 1931 System (incorporated by reference, see 571.108 S5.2 of this title) using CIE Illuminant A (2856K).

S14.4.2.2.4.5 After completion of the outdoor exposure test all materials must conform to the color test of this standard in the range of thickness stated by the material manufacturer.

S14.4.2.3 Heat test.

S14.4.2.3.1 Procedure. Two samples of each thickness of each material must be supported at the bottom, with at least 51 mm of the sample above the support, in the vertical position in such a manner that, on each side, the minimum uninterrupted area of exposed surface is not less than 3225 sq mm. The samples are placed in a circulating air oven at  $79 \pm 3$  °C for two hours.

S14.4.2.3.2 Performance requirements. After completion of the heat exposure and cooling to room ambient temperature, a test specimen must show no change in shape and general appearance discernable to the naked eye when compared with an unexposed specimen and continue to conform to the applicable color test requirement of this standard.