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**List of**

**Acceptable Plastics for**

**Optical Lenses and Reflectors**

**Used on Motor Vehicles**

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**Fall 2004**  
**December 7, 2004**

**Automotive Manufacturers Equipment Compliance Agency, Inc.**

**P.O. Box 76960   National Capitol Station  
Washington, D.C. 20013-6960**

**1101 15th Street N.W., Suite 607  
Washington, D.C. 20005**

**[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 manufacturer has specialized products for different applications, processing conditions, manufacturing equipment, lightsources and final use.***

***Please use the manufacturer addresses and websites in each listing 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**

The Code "Q" denotes material that must be coated to pass the weathering test and which can be used for any device when so coated.

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. Reflex reflectors shall meet the haze requirements of SAE J576, JUL 91, paragraph 4.2.3.

The Code "\$" denotes material with up to 30% haze that is acceptable for lighting equipment required by 49 CFR 571.108 S5.1.2, but which **cannot** be used in lenses of reflex reflectors or in lenses **in front** of reflex reflectors. Reflex reflectors shall meet the haze requirements of SAE J576, paragraph 4.2.3.

When this material is used for state/provincial regulated lighting device lenses, the applicable state/provincial regulations shall be met.

## **4. DISTRIBUTION**

This list is distributed free on a semiannual basis and is subject to change twice a year. Up-to-date Information on any materials that may have been accepted after the date of publication of this list may be obtained from the Automotive Manufacturers Equipment Compliance Agency.

## **5. DEFINITIONS**

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

- 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.

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.

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 for all three required thicknesses. The samples involved must meet the color coordinates for every required thickness.

The ASTM E 308-66 method uses an illuminant A light source energized to 2658k. *If you use anything other than an incandescent light source at 2658k you MUST verify that the resulting color meets the specifications of SAE J-578 for every 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 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. Check with the 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 Spring 2004 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.*

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<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
ARKEMA ITALIA ATOGLAS DIVISION <a href="http://www.arkemagroup.com">www.arkemagroup.com</a> (FORMERLY ATOFINA CHEMICALS ATOGLAS DIVISION)	ALTUGLAS GR 8	POLYMETHYL METHACRYLATE	283/8	YELLOW
	ALTUGLAS GR 8C		283/B-3	YELLOW
	ALTUGLAS GR 9D		283/B-8	YELLOW
	ALTUGLAS GR 9DX		285	YELLOW
	ALTUGLAS GR 9E		2361	YELLOW
			2820	YELLOW
			2821	YELLOW
			2830	YELLOW
			2831	YELLOW
			2833	YELLOW
			2838	YELLOW
ASAHI CHEMICAL <a href="http://www.asahi-kasei.co.jp">www.asahi-kasei.co.jp</a>	DELMORE H-350A	POLYMETHACRYLIC	99141	CLEAR
	ANHYDRIDE ACRYLIC		D33144	RED
ASAHI CHEMICAL <a href="http://www.asahi-kasei.co.jp">www.asahi-kasei.co.jp</a>	DELPET 70H	POLYMETHYL METHACRYLATE	31140	RED
	DELPET 70N		31141	RED
	DELPET 80N		31142	RED
	DELPET 80NB		31143	RED
	DELPET 80NE		31144	RED
	DELPET 80NF		31145	RED
	DELPET 80NP		31151	RED
	DELPET 80NR		31152	RED
	DELPET 80NS		31153	RED
	DELPET 800F		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

<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	23082	YELLOW
	DELPET 70N		23083	YELLOW
	DELPET 80N		23084	YELLOW
<a href="http://www.asahi-kasei.co.jp">www.asahi-kasei.co.jp</a>	DELPET 80NB		23090	YELLOW
	DELPET 80NE		23091	YELLOW
	DELPET 80NF		23100	YELLOW
	DELPET 80NP		23102	YELLOW
	DELPET 80NR		23103	YELLOW
	DELPET 80NS		23501	YELLOW
	DELPET 800F		23502	YELLOW
			23503	YELLOW
			23505	YELLOW
			23506	YELLOW
			23507	YELLOW
			9814	GRAY
			9834	GRAY
			9870	GRAY
			90810	GRAY
			90811	GRAY
			90813	GRAY
			90816	GRAY
			90817	GRAY
			90818	GRAY
			90821	GRAY
			90823	GRAY
			90825	GRAY
			90827	GRAY
			90828	GRAY
			90832	GRAY
			90836	GRAY
			90838	GRAY
			90841	GRAY
			90844	GRAY
			90848	GRAY
			90853	GRAY
			90854	GRAY
			90861	GRAY
			90866	GRAY
			90875	GRAY
			90876	GRAY
			90878	GRAY
			90881	GRAY
			90882	GRAY
			90883	GRAY
			90884	GRAY
			90885	GRAY
			90886	GRAY
			90888	GRAY
			90889	GRAY
			90899	GRAY



<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
BARLO PLASTICS GmbH	LUCRYL G 77 LUCRYL G 77E LUCRYL G 87E <a href="http://www.barloplastics.com">www.barloplastics.com</a> LUCRYL G 88 LUCRYL G 88E LUCRYL G 88 Q11 LUCRYL G 88 Q18 LUCRYL KR 2006/1 LUCRYL KR 2007/1 LUCRYL KR 2008/1	POLYMETHYL METHACRYLATE	OR 013 OR 028 OR 037 OR 050 OR 072 OR 078	YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW
<hr/>				
BASF AG <a href="http://www.bASF.de">www.bASF.de</a>	LUCRYL G77 LUCRYL G77E LUCRYL G77 Q11 LUCRYL G87E LUCRYL G88 LUCRYL G88E LUCRYL G88 Q11 LUCRYL G88 Q18 LUCRYL KR 2006/1 LUCRYL KR 2007/1 LUCRYL KR 2008/1 LUCRYL KR 2009	POLYMETHYL METHACRYLATE	KK 000 RT 011 RT 014 RT 018 RT 045 RT 049 RT 050 RT 051 RT 053 RT 055 RT 057 RT 058 RT 059 RT 060 RT 063 RT 064 RT 065 RT 066 RT 067 RT 068 RT 070 RT 071 RT 072 RT 074 RT 075 RT 076 RT 079 RT 080 OR 002 OR 005 OR 007 OR 008 OR 013 OR 028 OR 037 OR 050 OR 072 OR 078 GR 013	CLEAR RED GREY
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<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
BASF AG <a href="http://www.bASF.de">www.bASF.de</a>	LURAN 378P	STYRENE-ACRYLONITRILE COPOLYMER	86589	YELLOW

BAYER MATERIALSCIENCE AG (EUROPE)

[www.bayermaterialsience.com](http://www.bayermaterialsience.com)

APEC 1603 (FORMERLY KNOWN AS: APEC-KU1-9333) (coated)	HIGH-HEAT POLYCARBONATE	550042 551022	CLEAR Q CLEAR Q
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Coated Bayer MaterialScience AG (Europe) Apec 1603 plastics may only be treated with the following acceptable coatings applied to the molded lens: UVHC 3000

Information on UVHC 3000 hard coat may be obtained by writing to the following address:

GE SILICONES  
HUDSON RIVER ROAD  
WATERFORD, NY 12118  
[www.gesilicones.com](http://www.gesilicones.com)

BAYER MATERIALSCIENCE AG (EUROPE)

[www.bayermaterialsience.com](http://www.bayermaterialsience.com)

APEC 1803 (FORMERLY KNOWN AS: KU1-9353) (coated)	HIGH-HEAT POLYCARBONATE	550042 551022 350335 250322	CLEAR Q CLEAR Q RED Q YELLOW Q
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Coated Bayer MaterialScience AG (Europe) Apec 1803 plastics may only be treated with the following acceptable coatings applied to the molded lens: LS123 coating, ACRYKING K101, F-328, PH 220, and PH328, LENSGARD LTC5000 (LENSGARD II), Stanley SH-41 or Sherwin-Williams V88VC31

Information on Acryking K101, F-328, PH-220 and PH 328 coatings may be obtained by writing to the following address:

MITSUBISHI RAYON CO., LTD.  
3-19, KYOBASHI, 2-CHOME, CHUO-KU  
TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

Information on LS123 coating, Lensgard LTC5000 (Lensgard II) hard coat may be obtained by writing to the following address:

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

(coating information continued on next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
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Information on V88VC31 coating may be obtained by writing to the following address:

SHERMAN-WILLIAMS AUTOMOTIVE FINISHES CORP.  
 388 ROBINS DRIVE  
 TROY, MI 48083  
[www.sherwin-automotive.com](http://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](http://www.stanley.co.jp)

BAYER MATERIALSCIENCE AG (EUROPE)

[www.bayermaterialscience.com](http://www.bayermaterialscience.com)

MAKROLON 2407	POLYCARBONATE	550012	CLEAR #
MAKROLON 2607		550391	CLEAR #
MAKROLON 2807		550392	CLEAR #
MAKROLON 3103		550394	CLEAR #
(MAKROLON AL2247 PROTECTED APPLICATIONS ONLY)		550395	CLEAR #
MAKROLON AL2447		550396	CLEAR #
MAKROLON AL2647		551070	CLEAR #
MAKROLON AL2847		350391	RED #
MAKROLON AL3147		350392	RED #
(coated or uncoated)		350393	RED #
		350394	RED #
		357866	RED #
		250391	YELLOW #
		250392	YELLOW #
		250393	YELLOW #
		256866	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: LS123, SHP300/SHC3000, SHP401/AS4000, SHP401/4002, PHC-587, UVHC3000, LHP100/LHC100, LENSGARD LPC1000/LTC4000 (LENSGARD I), LENSGARD LTC5000 (LENSGARD II), ACRIPLEX 100PSR/100SR, SRC UVT 146 and SRC UVT 200 hard coats, F-328, PH-220, PH-328, PH-700, ACRYKING K101, K103, and PERMACLEAR IV OR V88VC31 coatings.

Mitsubishi Rayon F-328, PH-220, PH-328, PH-700, LENSGARD LTC5000 (LENSGARD II) hard coats, GE PHC-587 hardcoat, Redspot SRC UVT 146 and UVT 200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, UVT 200 V5 coatings, UVHC 3000, Sherwin Williams PERMACLEAR IV and V88VC31 are only acceptable for use on MAKROLON AL2447 and MAKROLON AL2647.

(coating information continued on next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
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Color 550012 is only acceptable for use in MAKROLON AL2447 and MAKROLON AL2647.

Information on Mitsubishi Rayon F-328, PH220, PH-328, PH-700, ACRYKING K101, and K103 may be obtained by writing to the following address:

MITSUBISHI RAYON CO., LTD.  
3-19, KYOBASHI, 2-CHOME, CHUO-KU  
TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

Information on LS123 coating, Lensgard LPC 1000/LTC 4000(Lensgard I) and Lensgard LTC5000 (Lensgard II) hard coats may be obtained by writing to the following address:

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

Information on LHP100/LHC100, SHP300/SHC3000, SHP401/AS4000, SHP401/4002, GE PHC-587 and UVHC 3000 hard coats may be obtained by writing to the following address:

GE SILICONES  
HUDSON RIVER ROAD  
WATERFORD, NY 12118  
[www.gesilicones.com](http://www.gesilicones.com)

Information on Redspot SRC UVT 146 and UVT 200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, UVT 200 V5 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 ACRIPLEX 100PSR/100SR hard coat may be obtained by writing to the following address:

RöHM GmbH & Co. KG  
KIRSCHENALLE  
64293 DARMSTADT, GERMANY  
[www.roehm.com](http://www.roehm.com)

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

SHERMAN-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>

BAYER MATERIALSCIENCE LLC (America)  
[www.bayermaterialsclascnafta.com](http://www.bayermaterialsclascnafta.com)

APEC 1603 (FORMERLY KNOWN AS: APEC DP9-9333) (coated)	HIGH-HEAT POLYCARBONATE	550042 551022	CLEAR Q CLEAR Q
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Coated Bayer MaterialScience LLC (America) Apec 1603 plastics may only be treated with the following acceptable coatings applied to the molded lens: UVHC 3000

Information on UVHC 3000 hard coat may be obtained by writing to the following address:

GE SILICONES  
 HUDSON RIVER ROAD  
 WATERFORD, NY 12118  
[www.gesilicones.com](http://www.gesilicones.com)

BAYER MATERIALSCIENCE LLC (America)  
[www.bayermaterialsclasc.com](http://www.bayermaterialsclasc.com)

APEC 1803 (FORMERLY KNOWN AS: DP9-9353) (coated)	HIGH-HEAT POLYCARBONATE	550042 551022 350335 350340 250196 250322 256866	CLEAR Q CLEAR Q RED Q RED Q YELLOW Q YELLOW Q YELLOW Q
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Coated Bayer MaterialScience LLC (America) Apec 1803 plastics may only be treated with the following acceptable coatings applied to the molded lens: LS123, ACRYKING K101, F-328, PH 220, PH 328, LENSGARD LTC5000 (LENSGARD II), or Sherwin-Williams V88VC31

Information on LS123 coating and Lensgard LTC5000 (Lensgard II) hard coat may be obtained by writing to the following address:

ROHM & HAAS COMPANY  
 2701 EAST 170TH STREET  
 LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

Information on ACRYKING K101, F-328, PH-220, and PH-328 coatings may be obtained by writing to the following address:

MITSUBISHI RAYON CO., LTD.  
 3-19, KYOBASHI, 2-CHOME, CHUO-KU  
 TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

(coating information continued on next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
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Information on V88VC31 coating may be obtained by writing to the following address:

SHERMAN-WILLIAMS AUTOMOTIVE FINISHES CORP.  
 388 ROBINS DRIVE  
 TROY, MI 48083  
[www.sherwin-automotive.com](http://www.sherwin-automotive.com)

BAYER MATERIALSCIENCE LLC (America)

[www.bayermaterialsciencesnafta.com](http://www.bayermaterialsciencesnafta.com)

POLYCARBONATE	550012	CLEAR #
(MAKROLON AL2247 PROTECTED APPLICATIONS ONLY)	551066	CLEAR #
MAKROLON AL2447	551067	CLEAR #
MAKROLON AL2647	551068	CLEAR #
MAKROLON AL2847	551069	CLEAR #
MAKROLON AL3147 (coated or uncoated)	551070	CLEAR #
	357866	RED #
	357867	RED #
	357868	RED #
	357869	RED #
	357915	RED #
	256811	YELLOW #
	256847	YELLOW #
	256858	YELLOW #
	256861	YELLOW #
	256866	YELLOW #
	256867	YELLOW #
	256868	YELLOW #
	256869	YELLOW #
	256894	YELLOW #
	256896	YELLOW #
	256908	YELLOW #
	256911	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: LC50, LS123, Red Spot UVT-146, UVT 200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, UVT 200 V5 coatings, SHP300/SHC3000, SHP401/AS4000, SHP401/4002, PHC-587, UVHC3000, LENSGARD LPC1000/LTC4000 (LENSGARD I), LENSGARD LTC5000 (LENSGARD II), LHP100/LHC100, LHP100/AS4000 hard coats, PERMACLEAR IV, ACRYKING K101 coating, K101 special hard coat, F-328, PH-220, PH-328, PH-700 and PERMACLEAR V88VC31 coatings.

Mitsubishi Rayon F-328, PH-220, PH-328, PH-700, LENSGARD LTC5000 (LENSGARD II) hardcoats, GE UVHC3000 AND PHC-587 hardcoat, REDSPOT SRC UVT 146 and SRC UVT 200 hardcoats, and Sherwin Williams PERMACLEAR IV and V88VC31 are only acceptable for use on MAKROLON AL2447 and MAKROLON AL2647.

Color 550012 is only acceptable for use in MAKROLON AL2447 and MAKROLON AL2647.

(coating information continued on next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
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Information on Mitsubishi Rayon F-328, PH220, PH-328, PH-700 coatings and ACRYKING K101 coating or ACRYKING K101 Special hard coat may be obtained by writing to the following address:

MITSUBISHI RAYON CO., LTD.  
3-19, KYOBASHI, 2-CHOME, CHUO-KU  
TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

Information on LC50 coating may be obtained by writing to the following address:

BAYER MATERIALSCIENCE LLC  
POLYMERS DIVISION  
100 BAYER ROAD  
PITTSBURGH, PA 15205-9741  
[www.bayermaterialscience.com](http://www.bayermaterialscience.com)

Information on SHP300/SHC3000; SHP401/AS4000; SHP401/4002; PHC-587; LHP100/LHC100 LHP100/AS4000 and UVHC 3000 hard coats may be obtained by writing to the following address:

GE SILICONES  
HUDSON RIVER ROAD  
WATERFORD, NY 12118  
[www.gesilicones.com](http://www.gesilicones.com)

Information on LS123 coating, Lensgard LPC 1000/LTC 4000(Lensgard I) and Lensgard LTC5000 (Lensgard II) hard coats may be obtained by writing to the following address:

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

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

SHERMAN-WILLIAMS AUTOMOTIVE FINISHES CORP.  
388 ROBINS DRIVE  
TROY, MI 48083  
[www.sherwin-automotive.com](http://www.sherwin-automotive.com)

Information on UVT-146 AND UVT-200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, UVT 200 V5 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)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
CHI MEI CORPORATION	ACRYREX CM-205  <a href="http://www.chimei.com.tw">http://www.chimei.com.tw</a>	POLYMETHYL METHACRYLATE	N-000 R-103 R-104 A-202 A-203	CLEAR RED RED YELLOW YELLOW
COMPANHIA QUÍMICA METACRIL	AC-ACRIGEL CR-ACRIGEL FW-ACRIGEL MP-ACRIGEL	POLYMETHYL METHACRYLATE	DH-01 DH-207 DH-209 DH-111	CLEAR RED RED YELLOW
CYRO IND.  <a href="http://www.cyro.com">www.cyro.com</a>	ACRYLITE 8N ACRYLITE H-15 ACRYLITE S-10 ACRYLITE PLUS ZK-6X ACRYLITE PLUS ZK-MX ACRYLITE PLUS ZK-PX	POLYMETHYL METHACRYLATE	000 98186 543A 551 870B 900 901 904 970 973 33440 33450 33661 100 114 115 154 13071 18108 23060 23085	CLEAR CLEAR NEUTRAL NEUTRAL NEUTRAL RED RED RED RED RED RED 100 114 115 154 13071 18108 23060 23085
DAICEL POLYMER LTD.  <a href="http://www.daicel.co.jp">www.daicel.co.jp</a>	CEVIAN N 080W CEVIAN N 085W	STYRENE/ ACRYLONITRILE	01042 1Z026 1Z027 2Z010 2Z011 2Z012 2Z013 20385 20388	RED RED RED YELLOW YELLOW YELLOW YELLOW YELLOW 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.	ACRYPET VH ACRYPET VHS	POLYMETHYL METHACRYLATE	53180 53185 53187 53190 54115 54132 54135 54165	GRAY GRAY GRAY GRAY GRAY GRAY GRAY GRAY
Email: diap@anet.net.th				
DOW CHEMICAL <a href="http://www.dow.com">www.dow.com</a>	CALIBRE 303-10 (coated or uncoated)	POLYCARBONATE	30003 160039 150038	WHITE \$ RED \$ YELLOW \$

Coated Dow Chemical plastics may only be treated with the following acceptable coatings applied to the molded lens: LS123 Coating and SHP401/AS4000 hard coat.

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

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

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

GE SILICONES  
HUDSON RIVER ROAD  
WATERFORD, NY 12118  
[www.gesilicones.com](http://www.gesilicones.com)

DSM POLYMER HYDROCARBONS <a href="http://www.dsm.com">www.dsm.com</a>	XANTAR 18 U XANTAR 19 U XANTAR 22 U XANTAR 24 U XANTAR 27 U (coated or uncoated)	POLYCARBONATE	010013 51010 51011 51012 51013 51014 51019 91012 91013 91014 61004 61005 61006 61007 61008	CLEAR \$ RED \$ RED \$ RED \$ RED \$ RED \$ RED BLUE \$ BLUE \$ BLUE \$ ORANGE \$ ORANGE \$ ORANGE \$ ORANGE \$ ORANGE \$
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Coated DSM Polymer & Hydrocarbons plastics are only acceptable when treated with the following coatings applied to the molded lens: LS123 coating

(coating information continued on next page)

MFR. TRADE NAME AND FLOW FORMULATION TYPE OF RESIN NUMBER COLOR

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

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

GE PLASTICS (U.S.A.)	LEXAN LS-1	POLYCARBONATE	111	WHITE #
	LEXAN LS-2		111H	WHITE #
	LEXAN LS-2-111C		112	WHITE #
<a href="http://www.geplastics.com">www.geplastics.com</a>	LEXAN LS-3		51073	WHITE #
	LEXAN LSHF (HIGH FLOW) (coated or uncoated)		71127	WHITE #
			71185	WHITE #
			71194	WHITE #
			71274	WHITE #
			71297	WHITE #
			71469	WHITE #
			616	RED #
			6111	RED #
			6162	RED #
			6164	RED #
			6193	RED #
			7866	RED #
			7867	RED #
			7868	RED #
			7869	RED #
			61014	RED #
			61079	RED #
			61086	RED #
			61086	RED #
			61443	RED #
			414	YELLOW #
			4135	YELLOW #
			4158	YELLOW #
			4168	YELLOW #
			4169	YELLOW #
			4173	YELLOW #
			4194	YELLOW #
			41152	YELLOW #
			YW 5005T	YELLOW #
			2148	BLUE #

Coated GE USA plastics may only be treated with the following acceptable coatings applied to the molded lens: LS123 coating, LENSGARD II UV and hard coat; LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHC6000, PHC 200, PHC587, PHC587B, SH2, SH-41, SH-50, UVHC 3000 hard coats, UVT-200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, UVT 200 V5, ACRYKING K101, ACRYKING F328, or ACRYKING PH503 coatings, FUJIHARD 2500 hard coat and FUJISOFT 2600 coating

(coating information continued on next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
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Information on LS123 coating may be obtained by writing to the following address:

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHC6000, PHC 200, PHC587, PHC587B or UVHC3000 hard coats may be obtained by writing to the following address:

GE PLASTICS B.V. PLASTICSLAAN 1 P. O. BOX 117 4600 AC BERGEN OP ZOOM THE NETHERLANDS	GE SILICONES HUDSON RIVER ROAD WATERFORD, NY 12118 <a href="http://www.gesilicones.com">www.gesilicones.com</a>
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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 Mitsubishi Rayon Acryking F-328, Acryking K101 and Acryking PH503 coatings may be obtained by writing to the following address:

MITSUBISHI RAYON CO., LTD.  
3-19, KYOBASHI, 2-CHOME, CHUO-KU  
TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

Information on FUJIHARD 2500 HARD COAT and FUJISOFT 2600 coating may be obtained by writing to the following address:

FUJIKURA KASEI CO., LTD.  
2-6-15 SIBAKOUEN,  
MINATO-KU, TOKYO 105,  
JAPAN  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

Information on UVT-200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, UVT 200 V5 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)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
GE PLASTICS (AUSTRALIA)	LEXAN LS-1 LEXAN LS-2 LEXAN LS-2-111C <a href="http://www.anz.geplastics.com">www.anz.geplastics.com</a> (coated or uncoated)	POLYCARBONATE	111 111H 71127 414 YW 5005T 616 61443	WHITE # WHITE # WHITE # YELLOW # YELLOW # RED # RED #

GE Australia plastics may only be treated with the following acceptable coatings applied to the molded lens: LS123 coating, LENSGARD II UV and, LHP100/LHC100, PHC 200, PHC587, PHC587B, SHP300/SHC3000, LHP100/AS4000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SH2, SH-41, SH-50, UVHC3000 hard coats, UVT-200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, UVT 200 V5 coatings, ACRYKING K101, ACRYKING F328, OR ACRYKING PH503 coating.

Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHC6000, PHC 200, PHC587, PHC587B or UVHC3000 hard coats may be obtained by writing to the following address:

GE PLASTICS B.V.  
PLASTICSLAAN 1  
P. O. BOX 117  
4600 AC BERGEN OP ZOOM [www.gesilicones.com](http://www.gesilicones.com)  
THE NETHERLANDS

GE SILICONES  
HUDSON RIVER ROAD  
WATERFORD, NY 12118

Information on ACRYKING K101, ACRYKING F328, and ACRYKING PH503 coating may be obtained by writing to the following address:

MITSUBISHI RAYON CO., LTD.  
3-19, KYOBASHI, 2-CHOME, CHUO-KU  
TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

Information on UVT-200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, and UVT 200 V5 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 LS123 coating may be obtained by writing to the following address:

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

(coating information continued on next page)

MFR.	TRADE NAME AND FLOW FORMULATION	TYPE OF RESIN	NUMBER	COLOR
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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)

GE PLASTICS (NANSHA, CHINA)	LEXAN LS-1	POLYCARBONATE	111	WHITE #
	LEXAN LS-2		111H	WHITE #
	LEXAN LS-2-111C		112	WHITE #
<a href="http://www.ge-china.com">www.ge-china.com</a>	LEXAN LS-3		51073	WHITE #
	LEXAN LSHF (HIGH FLOW) (coated or uncoated)		71127	WHITE #
			71185	WHITE #
			71194	WHITE #
			71274	WHITE #
			71297	WHITE #
			71469	WHITE #
			616	RED #
			6111	RED #
			6162	RED #
			6164	RED #
			6193	RED #
			7866	RED #
			7867	RED #
			7868	RED #
			7869	RED #
			61014	RED #
			61079	RED #
			61086	RED #
			61086	RED #
			1443	RED #
			414	YELLOW #
			4135	YELLOW #
			4158	YELLOW #
			4168	YELLOW #
			4169	YELLOW #
			4173	YELLOW #
			4194	YELLOW #
			41152	YELLOW #
	YW 5005T			YELLOW #
	GY3A578T			GREY #
			2148	BLUE #

(coating information contained on next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>				
Coated GE Nansha, China plastics may only be treated with the following acceptable coatings applied to the molded lens: LS123 coating, LENSGARD II UV and hard coat; PHC 200, PHC587, PHC587B, LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHC6000, PHC587, SH2, SH-41, SH-50, UVHC 3000 hard coats, UVT-200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, UVT 200 V5 coatings, ACRYKING K101, ACRYKING F328, or ACRYKING PH503 coatings, FUJIHARD 2500 hard coat and FUJISOFT 2600 coating applied to the molded lens.								
Information on LS123 coating may be obtained by writing to the following address:								
<p style="text-align: center;">ROHM &amp; HAAS COMPANY 2701 EAST 170TH STREET LANSING, IL 60438 <a href="http://www.rohmhaas.com">www.rohmhaas.com</a></p>								
Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHC6000, PHC 200, PHC587, PHC587B or UVHC3000 hard coats may be obtained by writing to the following address:								
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">GE PLASTICS B.V. PLASTICSLAAN 1 P. O. BOX 117 4600 AC BERGEN OP ZOOM</td><td style="width: 50%;">GE SILICONES HUDSON RIVER ROAD WATERFORD, NY 12118 <a href="http://www.gesilicones.com">www.gesilicones.com</a></td></tr> <tr> <td colspan="2" style="text-align: center;">THE NETHERLANDS</td></tr> </table>					GE PLASTICS B.V. PLASTICSLAAN 1 P. O. BOX 117 4600 AC BERGEN OP ZOOM	GE SILICONES HUDSON RIVER ROAD WATERFORD, NY 12118 <a href="http://www.gesilicones.com">www.gesilicones.com</a>	THE NETHERLANDS	
GE PLASTICS B.V. PLASTICSLAAN 1 P. O. BOX 117 4600 AC BERGEN OP ZOOM	GE SILICONES HUDSON RIVER ROAD WATERFORD, NY 12118 <a href="http://www.gesilicones.com">www.gesilicones.com</a>							
THE NETHERLANDS								
Information on SH2, SH41 and SH-50 hard coats may be obtained by writing to the following address:								
<p style="text-align: center;">STANLEY ELECTRIC CO., LTD. 2-9-13, NAKAMEGURO, MEGURO-KU TOKYO 153, JAPAN <a href="http://www.stanley.co.jp">www.stanley.co.jp</a></p>								
Information on Mitsubishi Rayon Acryking F-328, Acryking K101 and Acryking PH503 coatings may be obtained by writing to the following address:								
<p style="text-align: center;">MITSUBISHI RAYON CO., LTD. 3-19, KYOBASHI, 2-CHOME, CHUO-KU TOKYO 104, JAPAN <a href="http://www.mrc.co.jp">www.mrc.co.jp</a></p>								
Information on FUJIHARD 2500 hard coat and FUJISOFT 2600 may be obtained by writing to the following address:								
<p style="text-align: center;">FUJIKURA KASEI CO., LTD. 2-6-15 SIBAKOUEN, MINATO-KU, TOKYO 105, JAPAN <a href="http://www.fkkasei.co.jp">www.fkkasei.co.jp</a></p>								

(coating information continued on next page)

(coating information contained on next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
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Coated GE Shanghai, China plastics may only be treated with the following acceptable coatings applied to the molded lens: LS123 coating, LENSGARD II UV and hard coat; LHP100/LHC100, LHP100/AS4000, PHC 200, PHC587, PHC587B SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHC6000, SH2, SH-41, SH-50, UVHC 3000 hard coats, UVT-200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, UVT 200 V5 coatings, ACRYKING K101, ACRYKING F328, or ACRYKING PH503 coatings, FUJIHARD 2500 hard coat and FUJISOFT 2600 coating

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

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHC6000, PHC 200, PHC587, PHC587B or UVHC3000 hard coats may be obtained by writing to the following address:

GE PLASTICS B.V. PLASTICSLAAN 1 P. O. BOX 117 4600 AC BERGEN OP ZOOM	GE SILICONES HUDSON RIVER ROAD WATERFORD, NY 12118 <a href="http://www.gesilicones.com">www.gesilicones.com</a>
THE NETHERLANDS	

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 Mitsubishi Rayon Acryking F-328, Acryking K101 and Acryking PH503 coatings may be obtained by writing to the following address:

MITSUBISHI RAYON CO., LTD.  
3-19, KYOBASHI, 2-CHOME, CHUO-KU  
Z TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

Information on FUJIHARD 2500 hard coat and FUJISOFT 2600 coating may be obtained by writing to the following address:

FUJIKURA KASEI CO., LTD.  
2-6-15 SIBAKOUEN,  
MINATO-KU, TOKYO 105, JAPAN  
[www.fkkasei.co.jp](http://www.fkkasei.co.jp)

(coating information continued on next page)

MFR.	TRADE NAME AND FLOW FORMULATION	TYPE OF RESIN	NUMBER	COLOR
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Information on UVT-200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, and UVT 200 V5 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)

GE PLASTICS (EUROPE)	LEXAN LS-1	POLYCARBONATE	111	WHITE #
	LEXAN LS-2		111H	WHITE #
	LEXAN LS-2-111C		112	WHITE #
<a href="http://www.geplastics.com">www.geplastics.com</a>	LEXAN LS-3		51073	WHITE #
	LEXAN LSHF (HIGH FLOW) (coated or uncoated)		71127	WHITE #
			71185	WHITE #
			71194	WHITE #
			71274	WHITE #
			71297	WHITE #
			71469	WHITE #
			616	RED #
			6111	RED #
			6162	RED #
			6164	RED #
			6193	RED #
			7866	RED #
			7867	RED #
			7868	RED #
			7869	RED #
			61014	RED #
			61079	RED #
			61086	RED #
			61443	RED #
			414	YELLOW #
			4135	YELLOW #
			4158	YELLOW #
			4168	YELLOW #
			4169	YELLOW #
			4173	YELLOW #
			4194	YELLOW #
			41152	YELLOW #
	YW 5005T		Y	WHITE #
	GY3A578T		G	GREY #
			2148	BLUE #

(coating information contained on next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>				
Coated GE Europe plastics may only be treated with the following acceptable coatings applied to the molded lens: LS123 coating, LENSGARD II UV and hard coat; LHP100/LHC100, LHP100/AS4000, PHC 200, PHC587, PHC587B, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHC6000, SH-2, SH-41, SH-50 and UVHC3000 hard coat; ACRYKING K101, ACRYKING F328 or ACRYKING PH503 coatings, UVT-200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, UVT 200 V5 coatings, FUJIHARD 2500 hard coat and FUJISOFT 2600 coating								
Information on LS123 coating may be obtained by writing to the following address:								
<p style="text-align: center;">ROHM &amp; HAAS COMPANY 2701 EAST 170TH STREET LANSING, IL 60438 <a href="http://www.rohmhaas.com">www.rohmhaas.com</a></p>								
Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHC6000, PHC 200, PHC587, PHC587B or UVHC3000 hard coats may be obtained by writing to the following address:								
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">GE PLASTICS B.V. PLASTICSLAAN 1 P. O. BOX 117 4600 AC BERGEN OP ZOOM</td><td style="width: 50%;">GE SILICONES HUDSON RIVER ROAD WATERFORD, NY 12118 <a href="http://www.gesilicones.com">www.gesilicones.com</a></td></tr> <tr> <td colspan="2" style="text-align: center;">THE NETHERLANDS</td></tr> </table>					GE PLASTICS B.V. PLASTICSLAAN 1 P. O. BOX 117 4600 AC BERGEN OP ZOOM	GE SILICONES HUDSON RIVER ROAD WATERFORD, NY 12118 <a href="http://www.gesilicones.com">www.gesilicones.com</a>	THE NETHERLANDS	
GE PLASTICS B.V. PLASTICSLAAN 1 P. O. BOX 117 4600 AC BERGEN OP ZOOM	GE SILICONES HUDSON RIVER ROAD WATERFORD, NY 12118 <a href="http://www.gesilicones.com">www.gesilicones.com</a>							
THE NETHERLANDS								
Information on SH2, SH41 and SH-50 hard coats may be obtained by writing to the following address:								
<p style="text-align: center;">STANLEY ELECTRIC CO., LTD. 2-9-13, NAKAMEGURO, MEGURO-KU TOKYO 153, JAPAN <a href="http://www.stanley.co.jp">www.stanley.co.jp</a></p>								
Information on Mitsubishi Rayon Acryking F-328, Acryking K101 and Acryking PH503 coatings may be obtained by writing to the following address:								
<p style="text-align: center;">MITSUBISHI RAYON CO., LTD. 3-19, KYOBASHI, 2-CHOME, CHUO-KU TOKYO 104, JAPAN <a href="http://www.mrc.co.jp">www.mrc.co.jp</a></p>								
Information on FUJIHARD 2500 hard coat and FUJISOFT 2600 coating may be obtained by writing to the following address:								
<p style="text-align: center;">FUJIKURA KASEI CO., LTD. 2-6-15 SIBAKOUEN, MINATO-KU, TOKYO 105, JAPAN <a href="http://www.fkkasei.co.jp">www.fkkasei.co.jp</a></p>								
Information on UVT-200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, UVT 200 V5 coatings may be obtained by writing to the following address:								
<p style="text-align: center;">RED SPOT PAINT &amp; VARNISH CO., INC. P.O. BOX 418 EVANSVILLE, IN 47703-0418 <a href="http://www.redspot.com">www.redspot.com</a></p>								

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
GE PLASTICS (JAPAN)	LEXAN LS-1	POLYCARBONATE	111	WHITE #
	LEXAN LS-2		111H	WHITE #
	LEXAN LS-2-111C		112	WHITE #
<a href="http://www.geplastics.co.jp">www.geplastics.co.jp</a>	LEXAN LS-2-111M		51073	WHITE #
	LEXAN LS-2-111S		71127	WHITE #
	LEXAN LS-3		71185	WHITE #
	LEXAN LSHF (HIGH FLOW) (coated or uncoated)		71194	WHITE #
			71274	WHITE #
			71297	WHITE #
			71469	WHITE #
			616	RED #
			6111	RED #
			6162	RED #
			6164	RED #
			6173	RED #
			6193	RED #
			61014	RED #
			61079	RED #
			61086	RED #
			61154	RED #
			61215	RED #
			61228	RED #
			61435	RED #
			61443	RED #
			414	YELLOW #
			4135	YELLOW #
			4158	YELLOW #
			4168	YELLOW #
			4169	YELLOW #
			4173	YELLOW #
			4194	YELLOW #
			41105	YELLOW #
			41150	YELLOW #
			41152	YELLOW #
			41318	YELLOW #
			41320	YELLOW #
	YW 5005T			YELLOW #
	GY3A578T			GREY #
			2148	BLUE #

(coating information contained on next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
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Coated GE Japan plastics may only be treated with the following acceptable coatings applied to the molded lens: LS123 coating, LENSGARD II UV and hard coat, LHP100/LHC100, LHP100/AS4000, PHC 200, PHC587, PHC587B SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHC6000, SH2, SH-41, SH-50 and UVHC3000 hard coats, UVT-200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, UVT 200 V5 coatings, ACRYKING K101, ACRYKING F328 or ACRYKING PH503 coatings, FUJIHARD 2500 and FUJIHARD 2551 hard coat and FUJISOFT 2600, FUJISOFT 2601, FUJISOFT 2602, FUJISOFT 2603, and FUJISOFT 2604 coatings

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

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

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHC6000, PHC 200, PHC587, PHC587B or UVHC3000 hard coats may be obtained by writing to the following address:

GE PLASTICS B.V. PLASTICSLAAN 1 P. O. BOX 117 4600 AC BERGEN OP ZOOM THE NETHERLANDS	GE SILICONES HUDSON RIVER ROAD WATERFORD, NY 12118 <a href="http://www.gesilicones.com">www.gesilicones.com</a>
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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 Mitsubishi Rayon Acryking F-328, Acryking K101 and Acryking PH503 coatings may be obtained by writing to the following address:

IMITSUBISHI RAYON CO., LTD.  
3-19, KYOBASHI, 2-CHOME, CHUO-KU  
TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

Information on FUJIHARD 2500 and FUJIHARD 2551 hard coat 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.  
2-6-15 SIBAKOUEN,  
MINATO-KU, TOKYO 105, JAPAN  
[www.fkasei.co.jp](http://www.fkasei.co.jp)

(coating information continued on next page)



<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
GE PLASTICS (SINGAPORE)	LEXAN LS-1	POLYCARBONATE	41318	YELLOW #
	LEXAN LS-2		41320	YELLOW #
	LEXAN LS-2-111C		YW 5005T	YELLOW #
<a href="http://www.geplastics.com.sg">www.geplastics.com.sg</a>	LEXAN LS-2-111M		GY3A578T	GREY #
	LEXAN LS-2-111S		2148	BLUE #
	LEXAN LS-3			
	LEXAN LSHF (HIGH FLOW) (coated or uncoated)			

Coated GE Singapore plastics may only be treated with the following acceptable coatings applied to the molded lens: LS123 coating, LENSGARD II UV and hard coat, LHP100/LHC100, LHP100/AS4000, PHC 200, PHC587, PHC587B, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SH2, SH-41, SH-50 and UVHC3000 card coats, UVT-200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, UVT 200 V5, ACRYKING K101, ACRYKING F328, or ACRYKING PH503 coatings

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

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

Information on LHP100/LHC100, LHP100/AS4000, SHP300/SHC3000, SHP300/AS4000, SHP401/AS4000, SHP401/SHC4002, SHC6000, PHC 200, PHC587, PHC587B or UVHC3000 hard coats may be obtained by writing to the following address:

GE PLASTICS B.V. PLASTICSLAAN 1 P. O. BOX 117 4600 AC BERGEN OP ZOOM	GE SILICONES HUDSON RIVER ROAD WATERFORD, NY 12118 <a href="http://www.gesilicones.com">www.gesilicones.com</a>
THE NETHERLANDS	

Information on SH2, 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)

Information on Mitsubishi Rayon Acryking F-328, Acryking K101 and Acryking PH503 coatings may be obtained by writing to the following address:

MITSUBISHI RAYON CO., LTD.  
3-19, KYOBASHI, 2-CHOME, CHUO-KU  
TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

Information on UVT-200, UVT 200 V1, UVT 200 V2, UVT 200 V3, UVT 200 V4, and UVT 200 V5 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)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
HANWHA CHEMICAL CORP.	GOLDREX HY 040H	POLYMETHYL METHACRYLATE	0002 R3012 Y2012	CLEAR RED YELLOW
<a href="http://hcc.hanwha.co.kr/">http://hcc.hanwha.co.kr/</a>				
IDEMITSU KOSAN CO., LTD.	TARFLON IV1900R TARFLON IV2200R (coated applications only) <a href="http://www.ipc.idemitsu.co.jp">www.ipc.idemitsu.co.jp</a>	POLYCARBONATE		CLEAR \$
(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: GE Silicones UVHC 3000 and PHC587; Stanley Electric SH-41 and SH-50 (only IV2200R)				
Information on UVHC3000 and PHC587 hard coat may be obtained by writing to the following address:				
GE SILICONES HUDSON RIVER ROAD WATERFORD, NY 12118 <a href="http://www.gesilicones.com">www.gesilicones.com</a>				
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 <a href="http://www.stanley.co.jp">www.stanley.co.jp</a>				
IDEMITSU KOSAN CO., LTD.	TARFLON V1500 TARFLON V1700 TARFLON V1900 TARFLON V2200 <a href="http://www.ipc.idemitsu.co.jp">www.ipc.idemitsu.co.jp</a>	POLYCARBONATE	C901 C902 C903 R901 R902 R903	CLEAR \$ CLEAR \$ CLEAR \$ RED \$ RED \$ RED \$
(formerly Idemitsu Petrochemical Co., Ltd.)	TARFLON V2500 TARFLON V2700 TARFLON V3000 (coated or uncoated)		R904 R905 Y901 Y902 Y903 Y904 Y905	RED \$ RED \$ YELLOW \$ YELLOW \$ YELLOW \$ YELLOW \$ YELLOW \$

Coated Idemitsu Petrochemical Co. plastics may only be treated with the following acceptable coatings applied to the molded lens: LS123 coating, ACRYKING K101, TARFLONCOAT 101 or TARFLONCOAT 201 coatings

(coating information continued on next page)

MFR. TRADE NAME AND FLOW FORMULATION TYPE OF RESIN NUMBER COLOR

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

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

Information on Mitsubishi Rayon Acryking K101 coating may be obtained by writing to the following address:

MITSUBISHI RAYON CO., LTD.  
3-19, KYOBASHI, 2-CHOME, CHUO-KU  
TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

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

IDEIMITSU KOSAN CO., LTD.  
1-1, MARUNOUCHI 3-CHOME, CHIYODA-KU  
TOKYO 100, JAPAN  
[www.ipc.idemitsu.co.jp](http://www.ipc.idemitsu.co.jp)

KURARAY CO., LTD.	PARAPET HR	POLYMETHYL METHACRYLATE	1000	CLEAR
<a href="http://www.kuraraychemical.com">www.kuraraychemical.com</a>	PARAPET HR-F		11095	CLEAR
	PARAPET HR-G		11161	CLEAR
	PARAPET HR-H		12064	CLEAR
	PARAPET HR-L		12065	CLEAR
	PARAPET HR-LE		16569	CLEAR
	PARAPET HR-N		1103	RED
	PARAPET HR-S		1104	RED
	PARAPET HR-X		1106	RED
	PARAPET HR-Z		1111	RED
	PARAPET GR		1116	RED
	PARAPET HR-X		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
			11040	RED
			11041	RED
			11042	RED
			11046	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	11048	RED
	PARAPET HR-F		11050	RED
	PARAPET HR-G		11051	RED
<a href="http://www.kuraraychemical.com">www.kuraraychemical.com</a>	PARAPET HR-H		11052	RED
	PARAPET HR-L		11053	RED
	PARAPET HR-LE		11054	RED
	PARAPET HR-N		11055	RED
	PARAPET HR-S		11056	RED
	PARAPET HR-Z		11057	RED
	PARAPET GR		11072	RED
			11083	RED
			11107	RED
			11120	RED
			11121	RED
			11152	RED
			11153	RED
			11165	RED
			11175	RED
			11178	RED
			11188	RED
			11196	RED
			11194	RED
			1207	YELLOW
			1208	YELLOW
			1237	YELLOW
			1240	YELLOW
			1241	YELLOW
			1242	YELLOW
			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

<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	17099	YELLOW
	PARAPET HR-F		17101	YELLOW
	PARAPET HR-G		17105	YELLOW
<a href="http://www.kuraraychemical.com">www.kuraraychemical.com</a>	PARAPET HR-H		17116	YELLOW
	PARAPET HR-L		17124	YELLOW
	PARAPET HR-LE		17185	YELLOW
	PARAPET HR-N		17191	YELLOW
	PARAPET HR-S		17192	YELLOW
	PARAPET HR-X		17209	YELLOW
	PARAPET HR-Z		10247	GRAY
	PARAPET GR		11161	GRAY
			11176	GRAY
			11198	GRAY
			12048	GRAY
			16072	GRAY
			16073	GRAY
			16074	GRAY
			16081	GRAY
			16133	GRAY
			16333	GRAY
			16365	GRAY
			16384	GRAY
			16395	GRAY
			16396	GRAY
			16421	GRAY
			16422	GRAY
			16423	GRAY
			16424	GRAY
			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
			16570	GRAY
			16574	GRAY
			17172	GRAY
			16071	BROWN
			17063	BROWN
			17079	BROWN
			17212	BROWN
			17213	BROWN

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
KURARAY CO., LTD. <a href="http://www.kuraraychemical.com">www.kuraraychemical.com</a>	PARAPET EH PARAPET GH PARAPET HA PARAPET SH	POLYMETHYL METHACRYLATE	1000	CLEAR
KURARAY CO., LTD <a href="http://www.kuraraychemical.com">www.kuraraychemical.com</a>	PARAPET SH-N	POLYMETHYL METHACRYLATE	1000 11099 11100 12042 17174 16437	CLEAR RED RED YELLOW YELLOW GREY
LG DOW POLYCARBONATE LTD. <a href="http://www.lg-dow.com">http://www.lg-dow.com</a>	CALIBRE 303-10 (coated or uncoated)	POLYCARBONATE	30003 160039 150038	WHITE \$ RED \$ YELLOW \$
Coated LG Dow Chemical plastics may only be treated with the following acceptable coatings applied to the molded lens: LS123 Coating and SHP401/AS4000 hard coat.				
Information on LS123 coating may be obtained by writing to the following address:				
ROHM & HAAS COMPANY 2701 EAST 170TH STREET LANSING, IL 60438 <a href="http://www.rohmhaas.com">www.rohmhaas.com</a>				
Information on SHP401/AS4000 hard coat may be obtained by writing to the following address:				
GE SILICONES HUDSON RIVER ROAD WATERFORD, NY 12118 <a href="http://www.gesilicones.com">www.gesilicones.com</a>				
LG MMA CORP. <a href="http://www.lgpmma.com">www.lgpmma.com</a>	EG-930 EH-910 IG-840 IH-830	POLYMETHYL METHACRYLATE	4001 4002 4006 4009 40010 40020 40030 40040 40050 40070 2001 20010 20020 20030 20040 30010 30040 8001	CLEAR RED RED RED RED RED RED RED RED RED RED RED RED RED RED RED YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW GREY



<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	4237	RED
	DIAKON CLG902L		4238	RED
	DIAKON CLG904		4239	RED
	DIAKON CMG314		4248	RED
<a href="http://www.lucitesolutions.com">www.lucitesolutions.com</a>	DIAKON CMG314N		4249	RED
	DIAKON CMG314R		4255	RED
	DIAKON CMG314V		4256	RED
	DIAKON CMG334V		4259	RED
	DIAKON CMH450		4260	RED
	DIAKON CMH454/L		4261	RED
	DIAKON CMH454V		4262	RED
	DIAKON HS2130		4263	RED
	DIAKON MG		4264	RED
	DIAKON MH		4265	RED
	DIAKON MM		4266	RED
	DIAKON NS		4267	RED
	DIAKON ST10H8L		4268	RED
	DIAKON ST15G8		4269	RED
	DIAKON ST20H8L		4270	RED
	DIAKON ST25G7		4271	RED
	DIAKON ST25G8		4272	RED
	DIAKON ST25H8L		4273	RED
	DIAKON ST35G7		310	YELLOW
	DIAKON ST35G8		311	YELLOW
	DIAKON ST35H8L		312	YELLOW
	DIAKON TD5H05/L		314	YELLOW
	DIAKON TD5H10/L		316	YELLOW
	DIAKON TD5H15/L		317	YELLOW
	DIAKON TD5H25/L		318	YELLOW
	DIAKON TD5H42/L		319	YELLOW
	DIAKON TD510		3064	YELLOW
	DIAKON TD515		3069	YELLOW
	DIAKON TD525		3071	YELLOW
	DIAKON TD542		3080	YELLOW
	DIAKON TD825		3081	YELLOW
	DIAKON TD842		3103	YELLOW
			3104	YELLOW
			3150	YELLOW
			3151	YELLOW
			3152	YELLOW
			3153	YELLOW
			3154	YELLOW
			3161	YELLOW
			3162	YELLOW
			3163	YELLOW
			3164	YELLOW
			3165	YELLOW
			6150	GREEN
			9388	GREY

The listing for Lucite International (U.S.A.) is contained 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>
MITSUBISHI ENGINEERING- PLASTICS CORP.	IUPILON ML-100 IUPILON ML-200 IUPILON ML-300 IUPILON ML-400	POLYCARBONATE	1001 1002 301 3001	RED \$ RED \$ YELLOW \$ YELLOW \$

[www.m-ep.co.jp](http://www.m-ep.co.jp)

Coated Mitsubishi Engineering Plastics Corp. Iupilon ML-300 plastics may only be treated with the following acceptable coatings applied to the molded lens: Mitsubishi Rayon Acryking F-328, K101-S, PH-220, PH-328 and Stanley Electric SH-50.

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

Coated Mitsubishi Engineering Plastics Corp. Iupilon ML-400 plastics are only acceptable when treated with Stanley Electric SH-41 hard coat applied to the molded lens.

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

Information on Mitsubishi Rayon Mitsubishi Rayon Acryking F-328, K101-S, PH-220, and PH-328 coatings may be obtained by contacting the following company:

MITSUBISHI RAYON CO., LTD.  
3-19, KYOBASHI, 2-CHOME, CHUO-KU  
TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

Information on 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, JAPAN  
[www.stanley.co.jp](http://www.stanley.co.jp)

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MITSUBISHI ENGINEERING- PLASTICS CORPORATION	IUPILON ML-100R IUPILON ML-200R IUPILON ML-300R IUPILON ML-400R IUPILON ML-500R	POLYCARBONATE	001 105 302 501 R5YNH	CLEAR \$ RED \$ YELLOW \$ GRAY SMOKE \$ GRAY SMOKE \$
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[www.m-ep.co.jp](http://www.m-ep.co.jp) (coated or uncoated)

Coated Mitsubishi Engineering-Plastics Corp. plastics may only be treated with the following acceptable coatings applied to the molded lens: IUPILON COAT UV or LS123 coating

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)

(coating information continued on next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
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Information on LS123 coating may be obtained by writing to the following address:

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

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MITSUBISHI ENGINEERING- PLASTICS CORPORATION <a href="http://www.m-ep.co.jp">www.m-ep.co.jp</a>	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 \$
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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:

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

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MITSUBISHI RAYON <a href="http://www.mrc.co.jp">www.mrc.co.jp</a>	ACRYPET UT 100 ACRYPET UT 200 SHINKOLITE UT 100 SHINKOLITE UT 200	POLYMETHYL METHACRYLATE	001 011 101 111 121 203 254 264 601	CLEAR CLEAR RED RED RED YELLOW YELLOW YELLOW GREY
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MITSUBISHI RAYON <a href="http://www.mrc.co.jp">www.mrc.co.jp</a>	ACRYPET IR ACRYPET NAV SHINKOLITE P IR SHINKOLITE P NAV	POLYMETHYL METHACRYLATE	001 011 101 112 113 116	CLEAR CLEAR RED RED RED RED
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<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 IR ACRYPET NAV SHINKOLITE P IR SHINKOLITE P NAV	POLYMETHYL METHACRYLATE	117 121 5101 203 206 254 255 256 257 258 259 264 265 5203 5206 531 541 53160 53170 53180 53190 54115 54135 54160 54165 54170	RED RED RED YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW GRAY GRAY GRAY GRAY GRAY GRAY GRAY GRAY GRAY CLEAR RED RED YELLOW YELLOW
MITSUBISHI RAYON <a href="http://www.mrc.co.jp">www.mrc.co.jp</a>	ACRYPET MD SHINKOLITE P MD	POLYMETHYL METHACRYLATE	001 101 114 203 206	CLEAR RED RED YELLOW YELLOW
MITSUBISHI RAYON <a href="http://www.mrc.co.jp">www.mrc.co.jp</a>	ACRYPET V SHINKOLITE P V	POLYMETHYL METHACRYLATE	001 011 101 114 131 146 147 148 149 160 203 206 236 283 284 285 286 287 288 291 292	CLEAR CLEAR RED RED RED RED RED RED RED RED RED YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW



<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
MITSUBISHI RAYON	ACRYPET VE	POLYMETHYL	5116	RED
	ACRYPET VES	METHACRYLATE	5117	RED
	ACRYPET VH		5118	RED
<a href="http://www.mrc.co.jp">www.mrc.co.jp</a>	ACRYPET VH4		5121	RED
	ACRYPET VHM		5122	RED
	ACRYPET VHS		5123	RED
	SHINKOLITE P VE		5131	RED
	SHINKOLITE P VES		5141	RED
	SHINKOLITE P VH		5142	RED
	SHINKOLITE P VHS		5143	RED
			5151	RED
			5161	RED
			5171	RED
			5207	RED
			5276	RED
			5296	RED
			5386	RED
			5456	RED
			201	YELLOW
			203	YELLOW
			205	YELLOW
			206	YELLOW
			209	YELLOW
			211	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
			268	YELLOW
			269	YELLOW
			270	YELLOW
			271	YELLOW
			272	YELLOW
			273	YELLOW
			290	YELLOW
			2001	YELLOW
			5203	YELLOW
			5206	YELLOW
			5213	YELLOW
			5216	YELLOW
			5223	YELLOW
			5226	YELLOW
			5233	YELLOW
			5236	YELLOW
			5243	YELLOW
			5246	YELLOW

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
MITSUBISHI RAYON	ACRYPET VE	POLYMETHYL	5253	YELLOW
	ACRYPET VES	METHACRYLATE	5256	YELLOW
	ACRYPET VH		5263	YELLOW
	ACRYPET VH4		5266	YELLOW
	ACRYPET VHM		5273	YELLOW
	ACRYPET VHS		5276	YELLOW
	SHINKOLITE P VE		5283	YELLOW
	SHINKOLITE P VES		5286	YELLOW
	SHINKOLITE P VH		5293	YELLOW
	SHINKOLITE P VHS		5296	YELLOW
			5303	YELLOW
			5306	YELLOW
			5313	YELLOW
			5316	YELLOW
			5323	YELLOW
			5326	YELLOW
			5333	YELLOW
			5336	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
			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

<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 VE	POLYMETHYL	54132	GRAY
	ACRYPET VES	METHACRYLATE	54135	GRAY
	ACRYPET VH		54140	GRAY
	ACRYPET VH4		54145	GRAY
	ACRYPET VHM		54155	GRAY
	ACRYPET VHS		54160	GRAY
	SHINKOLITE P VE		54165	GRAY
	SHINKOLITE P VES		54170	GRAY
	SHINKOLITE P VH			
	SHINKOLITE P VHS			
MITSUBISHI RAYON <a href="http://www.mrc.co.jp">www.mrc.co.jp</a>	CLEARLAC M100	METHYL	001	CLEAR
	CLEARLAC M101	METHACRYLATE/	101	RED
	CLEARLAC M102	STYRENE	5101	RED
		COPOLYMER	203	YELLOW
			206	YELLOW
			5203	YELLOW
			5206	YELLOW
			531	GRAY
			541	GRAY
NANTONG RAYON. CHEMICAL CO., LTD.	ACRYPET VH	POLYMETHYL METHACRYLATE	001	CLEAR
			361	CLEAR
			362	CLEAR
			363	CLEAR
			364	CLEAR
			5204	WHITE
			5406	WHITE
			PR-5556	WHITE
			53260	WHITE
			54260	WHITE
			55475	WHITE
			55480	WHITE
			57163	WHITE
			58154	WHITE
			101	RED
			111	RED
			112	RED
			113	RED
			116	RED
			117	RED
			118	RED
			119	RED
			120	RED
			121	RED
			122	RED
			123	RED
			124	RED
			125	RED
			126	RED
			127	RED
			128	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 VH	POLYMETHYL METHACRYLATE	129	RED
			143	RED
			171	RED
			1101	RED
			1102	RED
			1103	RED
			1104	RED
			1105	RED
			1106	RED
			1007	RED
			1108	RED
			1109	RED
			1110	RED
			5101	RED
			5101-B	RED
			5111	RED
			5112	RED
			5113	RED
			5114	RED
			5115	RED
			5116	RED
			5117	RED
			5118	RED
			5121	RED
			5122	RED
			5123	RED
			5131	RED
			5141	RED
			5142	RED
			5143	RED
			5151	RED
			5161	RED
			5171	RED
			5207	RED
			5276	RED
			5296	RED
			5386	RED
			5456	RED
			201	YELLOW
			203	YELLOW
			205	YELLOW
			206	YELLOW
			209	YELLOW
			211	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

<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 VH	POLYMETHYL METHACRYLATE	266	YELLOW
			267	YELLOW
			268	YELLOW
			269	YELLOW
			270	YELLOW
			271	YELLOW
			272	YELLOW
			273	YELLOW
			2001	YELLOW
			5203	YELLOW
			5206	YELLOW
			5213	YELLOW
			5216	YELLOW
			5223	YELLOW
			5226	YELLOW
			5233	YELLOW
			5236	YELLOW
			5243	YELLOW
			5246	YELLOW
			5253	YELLOW
			5256	YELLOW
			5263	YELLOW
			5266	YELLOW
			5273	YELLOW
			5276	YELLOW
			5283	YELLOW
			5286	YELLOW
			5293	YELLOW
			5296	YELLOW
			5303	YELLOW
			5306	YELLOW
			5313	YELLOW
			5316	YELLOW
			5323	YELLOW
			5326	YELLOW
			5333	YELLOW
			5336	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

<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 VH	POLYMETHYL METHACRYLATE	53160 53165 53168 53170 53173 53175 53178 53180 53183 53185 53187 53190 54107 54110 54112 54115 54118 54120 54130 54132 54135 54140 54145 54155 54160 54165 54170	GRAY CLEAR
NIPPON STEEL CHEMICAL CO., LTD.	ESTYRENE MS-660	METHYL METHACRYLATE/ STYRENE COPOLYMER	MA-T3-2342 MA-T3-3122 MA-T3-3123 MA-T3-3124	RED RED RED YELLOW
<a href="http://www.nscc.co.jp">www.nscc.co.jp</a>				
PLASKOLITE, INC.	CA-61 CA-71 CA-75 <a href="http://www.plaskolite.com">www.plaskolite.com</a> CA-82 CA-924 CA-927 CA-1000E CA-1000I	POLYMETHYL METHACRYLATE	RD 01 RD 03 RD 05 RD 10 RD 110 RD 114 RD 117 RD 125 RD 126 RD 128 RD 171 RD 176 RD 180 RD 181 RD 187 RD 188 RD 189	CLEAR RED RED RED RED RED RED RED RED RED RED RED RED RED RED RED RED RED RED

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
PLASKOLITE, INC.	CA-61	POLYMETHYL METHACRYLATE	RD 190	RED
	CA-71		RD 191	RED
	CA-75		RD 192	RED
<a href="http://www.plaskolite.com">www.plaskolite.com</a>	CA-82		RD 195	RED
	CA-924		YL 07	YELLOW
	CA-927		YL 12	YELLOW
	CA-1000E		YL 48	YELLOW
	CA-1000I		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
			BL 35	BLUE
			BL 92	BLUE
			BL 142	BLUE
			GY 58102	GRAY
			GY 58200	GRAY
PLASKOLITE, INC.	PL-30	POLYMETHYL METHACRYLATE	NC 10	CLEAR
<a href="http://www.plaskolite.com">www.plaskolite.com</a>			RD 01	CLEAR
			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 169	RED
			RD 171	RED
			RD 176	RED
			RD 180	RED
			RD 181	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
			BL 35	BLUE
			BL 95	BLUE
			BL 142	BLUE

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
POLICARBONATOS DO BRASIL	DUROLON V-1900 DUROLON V-2200 <a href="http://www.policarbonatos.com.br">www.policarbonatos.com.br</a>	POLYCARBONATE	C901 C902 C903 R901 R902 R903 R904 R905 Y901 Y902 Y903 Y904 Y905	CLEAR \$ CLEAR \$ CLEAR \$ RED \$ RED \$ RED \$ RED \$ RED \$ RED \$ YELLOW \$ YELLOW \$ YELLOW \$ YELLOW \$ YELLOW \$ YELLOW \$

Coated Polycarbonatos do Brasil plastics are only acceptable when treated with the following coatings applied to the molded lens: LS123 coating, ACRYKING K101, TARFLONCOAT 101, and TARFLONCOAT 201 coatings

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

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

Information on Mitsubishi Rayon Acryking K101 coating may be obtained by writing to the following address:

MITSUBISHI RAYON CO., LTD.  
3-19, KYOBASHI, 2-CHOME, CHUO-KU  
TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

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

IDEMITSU KOSAN CO., LTD.  
1-1, MARUNOUCHI 3-CHOME, CHIYODA-KU  
TOKYO 100, JAPAN  
[www.ipc.idemitsu.co.jp](http://www.ipc.idemitsu.co.jp)

ROHM GmbH	PLEXIGLAS or ROHAGLAS or ROHAGUM	POLYMETHYL METHACRYLATE	99530 99661	CLEAR AMBER
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<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
ROHM GmbH	PLEXIGLAS or ROHAGLAS or ROHAGUM 7 H 7 M 7 N 8 H 8 N hw 55 G8 PLEX 8805F = PLEXIMID 8805 PLEX 8846F PLEX 8854F zk 3BR zk 4BR zk 5BR zk 6BR zk 4HC zk 5HT zk 6HT zk 20 zk 30 zk 40	POLYMETHYL METHACRYLATE	33232 33460 33470 33661 33681 33691 33701 33711 33721 33780 3V125 3V126 3V136 3V137 13025 13115 13253 23085 23095 23105 23335 23340 75451 77670 7V205 7V244 7V265 7V268 7V269 7V270 7V271 7V272 7V273 7V274 7V275 65122 65542	CLEAR RED RED RED RED RED RED RED RED RED RED RED RED RED YELLOW YELLOW YELLOW AMBER AMBER AMBER AMBER AMBER GRAY GRAY GRAY GRAY GRAY GRAY GRAY GRAY GRAY GRAY GRAY GRAY GRAY GREEN GREEN
SAM YANG CORPORATION <a href="http://www.samyang.com">www.samyang.com</a>	TRIREX 3022L1 TRIREX 3022L2 TRIREX 3022L3 (coated or uncoated)	POLYCARBONATE	100 R112 R212 R312 A115 A212 A307 A412	CLEAR \$ RED \$ RED \$ RED \$ YELLOW \$ YELLOW \$ YELLOW \$ YELLOW \$

Coated Sam Yang Corp plastics are only acceptable when treated with the following coating applied to the molded lens: LS123

(coating information continued on next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
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Information on LS123 coating may be obtained by writing to the following address:

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

SINGAPORE	SUMIPEX MH	POLYMETHYL	011	CLEAR
METHYL		METHACRYLATE	4152	RED
METHACRYLATE PTE. LTD.			4312	RED
			4332	RED
			3121	YELLOW
			3231	YELLOW
			3331	YELLOW

SUMITOMO CHEMICAL CO., LTD.	SUMIPEX HT	POLYMETHYL METHACRYLATE	011	CLEAR
	SUMIPEX MG		012	CLEAR
	SUMIPEX MH		014	CLEAR
	SUMIPEX MHF		0151	CLEAR
<a href="http://www.sumitomo-chem.co.jp">www.sumitomo-chem.co.jp</a>	SUMIPEX MHG		0152	CLEAR
	SUMIPEX MHR		0153	CLEAR
	SUMIPEX MM		0154	CLEAR
	SUMIPEX MT		0155	CLEAR
	SUMIPEX TR		0161	CLEAR
			0162	CLEAR
			418	RED
			418(RR)	RED
			4032	RED
			4052	RED
			4053	RED
			4092	RED
			4152	RED
			4153	RED
			4162	RED
			4172	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

<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.	SUMIPEX HT	POLYMETHYL METHACRYLATE	3131	YELLOW
	SUMIPEX MG		3231	YELLOW
	SUMIPEX MH		3232	YELLOW
	SUMIPEX MHF		3241	YELLOW
<a href="http://www.sumitomo-chem.co.jp">www.sumitomo-chem.co.jp</a>	SUMIPEX MHG		3311	YELLOW
	SUMIPEX MHR		3321	YELLOW
	SUMIPEX MM		3331	YELLOW
	SUMIPEX MT		3341	YELLOW
	SUMIPEX TR		3421	YELLOW
			3901	YELLOW
			3902	YELLOW
			3904	YELLOW
			3906	YELLOW
			3910	YELLOW
			3911	YELLOW
			3914	YELLOW
			3916	YELLOW
			3917	YELLOW
			3925	YELLOW
			9001	GRAY
			9002	GRAY
			9003	GRAY
			9004	GRAY
			9005	GRAY
			9006	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
			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 DOW LTD.	CALIBRE 303-10 (coated or uncoated)	POLYCARBONATE	30003 30004 160039 150038	WHITE \$ WHITE \$ RED \$ YELLOW \$
	<a href="http://www.sumitomo-dow.co.jp">www.sumitomo-dow.co.jp</a>			

Coated Sumitomo Dow Ltd. plastics are only acceptable when treated with the following coatings applied to the molded lens: LS123 coating, FUJIHARD HH9986U N-3.

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

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

Information on FUJIHARD HH9986U N-3 coating may be obtained by writing to the following address:

FUJIKURA KASEI CO., LTD.  
2-6-15, SHINBAKOUEN, MINATO-KU  
TOKYO, 105-0011  
JAPAN  
[www.fkkasei.co.jp](http://www.fkkasei.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-1225Z PANLITE L-1225ZL PANLITE L-1250Z <a href="http://www.teijinkasei.co.jp">www.teijinkasei.co.jp</a> (coated or uncoated)	POLYCARBONATE	2500 2600 2700 2800 2900 300 310 320 330 340 400 410 420 430 440 3000 3100 3200 3300 3400 3500 3600 3700 3800 3900 7000 7100 7200 7300 7400 7500 7600 7700 7800 7900	RED # RED # RED # RED # RED # YELLOW # GRAY #

Coated Teijin Chemicals Plastics are only acceptable when treated with the following coatings applied to the molded lens: LS123 coating, SM710, SM115 hard coat, Acryking F-328, K-101S, Stanley Electric SH-41 and SH-50.

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

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

(coating information continued on next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
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Information on SM710 coating or SM115 hard coat may be obtained by writing to the following address:

TEIJIN CHEMICALS LTD.  
PLASTICS SALES DEPARTMENT  
HIBIYA DAIBIRU BUILDING  
2-2, UCHISAIWAICHO 1-CHOME  
CHIYODA-KU, TOKYO 100, JAPAN  
[www.teijinkasei.co.jp](http://www.teijinkasei.co.jp)

Information on Mitsubishi Rayon Acryking F-328, Acryking K-101S coating may be obtained by writing to the following address:

MITSUBISHI RAYON CO., LTD.  
3-19, KYOBASHI, 2-CHOME, CHUO-KU  
TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

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)

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 #
			110	CLEAR #
			200	RED #
			206	RED #
			210	RED #
			216	RED #
			220	RED #
			226	RED #
			230	RED #
			236	RED #
			240	RED #
			246	RED #
			2000	RED #
			2100	RED #
			2200	RED #
			2300	RED #
			2400	RED #
			2500	RED #
			2600	RED #
			2700	RED #
			2800	RED #
			2900	RED #
			300	YELLOW #
			310	YELLOW #
			320	YELLOW #

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
TEIJIN SINGAPORE PTE LTD.	PANLITE L-1225Z PANLITE L-1250Z (coated or uncoated)	POLYCARBONATE	330 340 400 410 420 430 440 3000 3100 3200 3300 3400 3500 3600 3700 3800 3900 7000 7100 7200 7300 7400 7500 7600 7700 7800 7900	YELLOW # YELLOW # GRAY #
	<a href="http://www.teijinkasei.co.jp">www.teijinkasei.co.jp</a>			

Coated Teijin Polycarbonate Singapore Pte. Ltd. are only acceptable when treated with the following coatings applied to the molded lens: LS123, SM710, SM115 hard coat, Acryking F-328, Acryking K-101S, and Stanley Electric SH-41 and SH-50.

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

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

Information on SM710 coating or SM115 hard coat may be obtained by writing to the following address:

TEIJIN CHEMICALS LTD.  
PLASTICS SALES DEPARTMENT  
HIBIYA DAIBIRU BUILDING  
2-2, UCHISAIWAICHO 1-CHOME  
CHIYODA-KU, TOKYO 100, JAPAN  
[www.teijinkasei.co.jp](http://www.teijinkasei.co.jp)

(coating information continued on next page)

<u>MFR.</u>	<u>TRADE NAME AND FLOW FORMULATION</u>	<u>TYPE OF RESIN</u>	<u>NUMBER</u>	<u>COLOR</u>
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Information on Mitsubishi Rayon Acryking F-328, and K-101S coating may be obtained by writing to the following address:

MITSUBISHI RAYON CO., LTD.  
3-19, KYOBASHI, 2-CHOME, CHUO-KU  
TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

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)

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THAI POLYCARBONATE CO., LTD	IUPILON ML-100	POLYCARBONATE	001	CLEAR \$
	IUPILON ML-200		0001	CLEAR \$
	IUPILON ML-300	R591A	CLEAR	
	IUPILON ML-400		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: Mitsubishi Rayon Acryking F-328, K101-S, PH-220, PH-328 and Stanley Electric SH-50.

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

Coated Mitsubishi Engineering Plastics Corp. Iupilon ML-400 plastics are only acceptable when treated with Stanley Electric SH-41 hard coat applied to the molded lens.

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

Information on Mitsubishi Rayon Mitsubishi Rayon Acryking F-328, K101-S, PH-220, and PH-328 coatings may be obtained by contacting the following company:

MITSUBISHI RAYON CO., LTD.  
3-19, KYOBASHI, 2-CHOME, CHUO-KU  
TOKYO 104, JAPAN  
[www.mrc.co.jp](http://www.mrc.co.jp)

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)

<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-100R IUPILON ML-200R IUPILON ML-300R IUPILON ML-400R IUPILON ML-500R (coated or uncoated)	POLYCARBONATE	001 105 302 501	CLEAR \$ RED \$ YELLOW \$ GRAY SMOKE \$

Coated Thai Polycarbonate Co. Ltd. Plastics are only acceptable when treated with the following coatings applied to the molded lens: IUPILON UV coat or LS123 coating.

Information on IUPILON 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)

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

ROHM & HAAS COMPANY  
2701 EAST 170TH STREET  
LANSING, IL 60438  
[www.rohmhaas.com](http://www.rohmhaas.com)

UNITIKA LTD. <a href="http://www.unitika.co.jp">www.unitika.co.jp</a>	U-POLYMER P-1001 U-POLYMER P-1001A U-POLYMER P-1001S U-POLYMER P-1003S	POLYARYLATE	2100 2101 2403 L-2403 2410 10-2051 050-2401 3071 3100 3101 3410 4410 05-3060 06-3060 9-4032 10-3050 10-4032 10-4048 050-3070 050-3401 050-4401 079-3070	CLEAR RED RED RED RED RED RED YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW YELLOW
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## **Regulatory Standard**

### **§571.108**

~~S5.1.1.29 A trailer equipped with a conspicuity treatment in conformance with paragraph S5.7 of this standard need not be equipped with the reflex reflectors required by Table I of this standard if the conspicuity material is placed at the locations of the reflex reflectors required by Table I.~~

~~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

### **49 CFR Ch. V (10-1-02 Edition)**

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.

~~S5.1.3 No additional lamp, reflective device or other motor vehicle equipment shall be installed that impairs the effectiveness of lighting equipment required by this standard.~~

~~S5.1.4 Each school bus shall be equipped with a system of either:~~

~~(a) Four red signal lamps designed to conform to SAE Standard J887, *School Bus Red Signal Lamps*, July 1964, and installed in accordance with that standard; or~~

~~(b) Four red signal lamps designed to conform to SAE Standard J887, *School Bus Red Signal Lamps*, July 1964, and four amber signal lamps designed to conform to that standard, except for their color, and except that their candlepower shall be at least 2½ times that specified for red signal lamps. Both red and amber lamps shall be installed in accordance with SAE Standard J887, except that:~~

~~(i) Each amber signal lamp shall be located near each red signal lamp, at the same level, but closer to the vertical centerline of the bus; and~~

~~(ii) The system shall be wired so that the amber signal lamps are activated only by manual or foot operation, and if activated, are automatically deactivated and the red signal lamps automatically activated when the bus entrance door is opened.~~

S5.1.5 The color in all lamps, reflective devices, and associated equipment to which this standard applies shall comply with SAE Standard J578c, *Color Specification for Electric Signal Lighting Devices*, February 1977.

#### **S5.2 Other requirements.**

~~S5.2.1 The words "it is recommended that," "recommendations," or "should be" appearing in any SAE Standard or Recommended Practice referenced or subreferenced in this standard shall be read as setting forth mandatory requirements, except that the aiming pads on the lens face and~~

*NOTE: To purchase a copy of SAE J-576 please follow this link:  
<http://www.sae.org/J-576>*

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