

Diamond Polymers DIAMALLOY GLY 7510 High Heat ASA Weatherable Polymer

Category : Polymer , Thermoplastic , ASA Polymer , Acrylonitrile/Styrene/Acrylate (ASA), Unreinforced, Molded

Material Notes:

Diamaloy GLY 7510 resin is a high gloss, high heat and high impact grade of ASA (acrylonitrile-styrene-acrylate) with good resistance to weather aging. This product is rated f1 by UL and be customized colored. Applications: Typical applications include those requiring weatherability and toughness for automotive exterior applications and lawn and garden applications. As with any product, use of Diamaloy GLY 7510 resin in a given application must be tested (including but not limited to field testing) in advance by the user to determine suitability. Information Provided by Diamond Polymers, Inc. & Network Polymers, Inc.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Diamond-Polymers-DIAMALLOY-GLY-7510-High-Heat-ASA-Weatherable-Polymer.php

| Physical Properties | Metric | English | Comments |
|-----------------------|--------------------------------------|--------------------------------------|------------|
| Specific Gravity | 1.08 g/cc | 1.08 g/cc | ASTM D792 |
| Linear Mold Shrinkage | 0.0040 - 0.0070 cm/cm | 0.0040 - 0.0070 in/in | ASTM D955 |
| Melt Flow | 4.0 g/10 min | 4.0 g/10 min | ASTM D1238 |
| | @Load 10.0 kg, Temperature 220 °C | @Load 22.0 lb, Temperature 428 °F | |
| | 8.3 g/10 min | 8.3 g/10 min | ASTM D1238 |
| | @Load 5.00 kg, Temperature 260 °C | @Load 11.0 lb, Temperature 500 °F | |

| Mechanical Properties | Metric | English | Comments |
|---------------------------|---------------------|----------------------|---------------------------------------|
| Hardness, Rockwell R | 101 | 101 | ASTM D785 |
| Tensile Strength at Break | 38.0 MPa | 5510 psi | chs 2.0 in/min; ASTM D638 |
| Tensile Strength, Yield | 52.0 MPa | 7540 psi | chs 2.0 in/min; ASTM D638 |
| Elongation at Break | 22 % | 22 % | chs 2.0 in/min; ASTM D638 |
| Elongation at Yield | 3.0 % | 3.0 % | chs 2.0 in/min; ASTM D638 |
| Tensile Modulus | 2.784 GPa | 403.8 ksi | chs 2.0 in/min; ASTM D638 |
| Flexural Strength | 79.0 MPa | 11500 psi | chs 0.05 in/min; 2 in span; ASTM D790 |
| | @Thickness 3.17 mm | @Thickness 0.125 in | |
| Flexural Modulus | 2.432 GPa | 352.7 ksi | chs 0.05 in/min; ASTM D790 |
| | @Thickness 3.17 mm | @Thickness 0.125 in | |
| Izod Impact, Notched | 0.427 J/cm | 0.800 ft-lb/in | ASTM D256 |
| | @Thickness 3.17 mm, | @Thickness 0.125 in, | |

| Mechanical Properties | Temperature -30.0 °C Metric | Temperature -22.0 °F English | Comments |
|-----------------------|--|---|--------------------------|
| | 2.46 J/cm | 4.61 ft-lb/in | ASTM D256 |
| | @Thickness 3.17 mm, Temperature 23.0 °C | @Thickness 0.125 in, Temperature 73.4 °F | |
| Impact Test | 20.8 J | 15.3 ft-lb | Total Energy; ASTM D3763 |
| | @Temperature -30.0 °C | @Temperature -22.0 °F | |
| | 27.0 J | 19.9 ft-lb | Total Energy; ASTM D3763 |
| | @Temperature 23.0 °C | @Temperature 73.4 °F | |

| Thermal Properties | Metric | English | Comments |
|--|---------------------------------|--------------------------------|-------------------|
| CTE, linear | 75.6 µm/m-°C | 42.0 µin/in-°F | ASTM E831 |
| | @Temperature -40.0 - 37.8 °C | @Temperature -40.0 - 100 °F | |
| CTE, linear, Transverse to Flow | 86.4 µm/m-°C | 48.0 µin/in-°F | ASTM E831 |
| | @Temperature -40.0 - 37.8 °C | @Temperature -40.0 - 100 °F | |
| Deflection Temperature at 0.46 MPa (66 psi) | 102 °C | 216 °F | 0.125"; ASTM D648 |
| Deflection Temperature at 1.8 MPa (264 psi) | 88.0 °C | 190 °F | 0.125"; ASTM D648 |
| Vicat Softening Point | 104 °C | 219 °F | ASTM D1525 |
| Flammability, UL94 | HB | HB | |
| | @Thickness 1.52 mm | @Thickness 0.0600 in | |

| Optical Properties | Metric | English | Comments |
|--------------------|--------|---------|----------------------------|
| Gloss | 94 % | 94 % | Untextured; 60°; ASTM D523 |

| Electrical Properties | Metric | English | Comments |
|----------------------------|-----------|-----------|---------------------|
| Hot Wire Ignition, HWI | 3.0 sec | 3.0 sec | PLC Code; ASTM 746A |
| High Amp Arc Ignition, HAI | 0.00 arcs | 0.00 arcs | PLC Code; ASTM 746A |

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215, Fengxian District, Shanghai City, China