






CYCOLOY® C6200**GE Plastics - Acrylonitrile Butadiene Styrene + PC**Unit System: English **View**

| Datasheet | Shown Below |
|--------------------|---|
| ASTM Data Sheet |  |
| ISO Data Sheet |  |
| CAMPUS® Data Sheet | -- |

Actions

| | |
|----------------------|---|
| Product Sourcing |  |
| E-mail a Datasheet |  |
| Product Alternatives |  |

General Information**Product Description**

PC+ABS, nonchlorinated, nombrominated flame retardant. Recommended for thin-wall applications

General

| | |
|--------------------------|---|
| Material Status | <ul style="list-style-type: none"> ● Commercial: Active |
| Availability | <ul style="list-style-type: none"> ● North America |
| Test Standards Available | <ul style="list-style-type: none"> ● ASTM ● ISO |
| Features | <ul style="list-style-type: none"> ● Bromine Content, None ● Chlorine Content, None ● Flame Retardant |
| Uses | <ul style="list-style-type: none"> ● Parts, Thin-walled |
| Forms | <ul style="list-style-type: none"> ● Pellets |
| Processing Method | <ul style="list-style-type: none"> ● Injection Molding |
| Multi-Point Data | <ul style="list-style-type: none"> ● Coefficient of Thermal Expansion vs. Temperature (ASTM E831) ● Elastic Modulus vs Temperature (ASTM D4065) ● Flexural DMA (ASTM D4065) ● Pressure-Volume-Temperature (PVT - Zoller Method) ● Shear DMA (ASTM D4065) ● Specific Heat vs. Temperature (ASTM D3417) ● Tensile Creep (ASTM D2990) ● Tensile Fatigue ● Tensile Stress vs. Strain (ASTM D638) ● Thermal Conductivity vs. Temperature (ASTM E1530) ● Viscosity vs. Shear Rate (ASTM D3835) |

ASTM and ISO Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|------------------|---------------|-------------|
| Density -Specific Gravity | 1.18 | sp gr 23/23°C | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (260°C/2.16 kg) | 14.5 | g/10 min | ASTM D1238 |
| Mold Shrink, Linear-Flow (0.126 in) | 0.0040 to 0.0060 | in/in | ASTM D955 |
| Mold Shrink, Linear-Trans (0.126 in) | 0.0040 to 0.0060 | in/in | ASTM D955 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength @ Yield ² | 9700 | psi | ASTM D638 |
| Tensile Elongation @ Brk ² | 50 | % | ASTM D638 |
| Flexural Modulus (3.94 in Span) ³ | 390000 | psi | ASTM D790 |
| Flexural Strength @ Yield (3.94 in Span) ³ | 15000 | psi | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (73 °F) | 10.0 | ft-lb/in | ASTM D256 |

| | | | |
|---|----------------------|--------------------------------|--------------------|
| Instrumented Dart Impact | | | ASTM D3763 |
| (-22 °F) | | Energy at Peak Load: 480 in-lb | |
| (73 °F) | | Energy at Peak Load: 540 in-lb | |
| Thermal | Nominal Value | Unit | Test Method |
| DTUL @264psi - Unannealed | | | ASTM D648 |
| (0.126 in) | | 190 °F | |
| (0.252 in) | | 195 °F | |
| Electrical | Nominal Value | Unit | Test Method |
| Surface Resistivity | 1.0E+15 | ohms | IEC 60093 |
| Volume Resistivity | 1.0E+15 | ohm-cm | IEC 60093 |
| Dissipation Factor | | | IEC 60250 |
| (50 Hz) | 0.00400 | | |
| (60 Hz) | 0.00400 | | |
| (1E+6 Hz) | 0.00800 | | |
| Arc Resistance (PLC) (Tungsten Electrode) | PLC 6 | | ASTM D495 |
| Electric Strength | | | IEC 60243-1 |
| (0.0315 in, in Oil) | 890 | V/mil | |
| (0.0630 in, in Oil) | 640 | V/mil | |
| (0.126 in, in Oil) | 430 | V/mil | |
| Relative Permittivity | | | IEC 60250 |
| (50 Hz) | 2.80 | | |
| (60 Hz) | 2.80 | | |
| (1E+6 Hz) | 2.70 | | |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating - UL | | | UL 94 |
| (0.0280 in) | HB | | |
| (0.0480 in) | V-1 | | |
| (0.0580 in) | V-0 | | |
| (0.0790 in) | 5VB | | |
| (0.134 in) | 5VA | | |
| UL 746 | Nominal Value | Unit | Test Method |
| Rel Temp Indx Mech w/Imp | 185 | °F | UL 746 |
| Rel Temp Indx Mech w/lmp | 185 | °F | UL 746 |
| Rel Temp Indx Elect | 185 | °F | UL 746 |
| Comparative Tracking Index (CTI) (PLC) | PLC 2 | | UL 746 |
| High Voltage Arc Tracking Rate (HVTR) (PLC) | PLC 3 | | UL 746 |
| Hot-wire Ignition (HWI) (PLC) | PLC 2 | | UL 746 |
| High Amp Arc Ignition (HAI) (PLC) | PLC 0 | | UL 746 |

Additional Properties

CSA File No. (See File for Complete Listing): LS88480
Spiral Flow, 260°C, 10 ips, 3.175 X 1524 mm: 685.8 mm

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|----------------------|-------------|
| Drying Temperature | 180 to 190 | °F |
| Drying Time | 3.0 to 4.0 | hr |
| Drying Time, Maximum | 8.0 | hr |
| Suggested Max Moisture | 0.040 | % |
| Suggested Shot Size | 30 to 80 | % |
| Rear Temperature | 430 to 490 | °F |
| Middle Temperature | 430 to 510 | °F |
| Front Temperature | 470 to 530 | °F |
| Nozzle Temperature | 470 to 530 | °F |
| Processing (Melt) Temp | 470 to 530 | °F |
| Mold Temperature | 140 to 180 | °F |
| Back Pressure | 50.0 to 100.0 | psi |
| Screw Speed | 40 to 70 | rpm |
| Vent Depth | 0.0015 to 0.0030 | in |

Notes

Typical properties: these are not to be construed as specifications.

Type I, 2 in/min

0.1 in/min



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