

## Valox\* Resin 195G

**Americas: LIMITED USE** 

POWDER FORM. For compounding only (not for injection molding). Unreinforced PBT. FDA 21CFR177.1660 compliant. Melt viscosity between 740 and 900 poise.

## **Property**

| TYPICAL PROPERTIES (1)                       |           |       |              |
|--|-----------|-------|--------------|
| MECHANICAL                                   | Value     | Unit  | Standard     |
| Tensile Stress, yld, Type I, 50 mm/min       | 56        | MPa   | ASTM D 638   |
| Tensile Strain, brk, Type I, 50 mm/min       | 17.9      | %     | ASTM D 638   |
| Flexural Stress, yld, 1.3 mm/min, 50 mm span | 84        | MPa   | ASTM D 790   |
| Flexural Modulus, 1.3 mm/min, 50 mm span     | 2390      | MPa   | ASTM D 790   |
| IMPACT                                       | Value     | Unit  | Standard     |
| Izod Impact, unnotched, 23°C                 | 1850      | J/m   | ASTM D 4812  |
| Izod Impact, notched, 23°C                   | 53        | J/m   | ASTM D 256   |
| THERMAL                                      | Value     | Unit  | Standard     |
| HDT, 0.45 MPa, 6.4 mm, unannealed            | 128       | °C    | ASTM D 648   |
| HDT, 1.82 MPa, 6.4 mm, unannealed            | 49        | °C    | ASTM D 648   |
| CTE, -40°C to 40°C, flow                     | 8.1E-05   | 1/°C  | ASTM E 831   |
| CTE, 60°C to 138°C, flow                     | 1.39E-04  | 1/°C  | ASTM E 831   |
| PHYSICAL                                     | Value     | Unit  | Standard     |
| Specific Gravity                             | 1.31      | -     | ASTM D 792   |
| Specific Volume                              | 0.76      | cm³/g | ASTM D 792   |
| Water Absorption, 24 hours                   | 0.08      | %     | ASTM D 570   |
| Mold Shrinkage, flow, 0.75-2.3 mm            | 0.9 - 1.6 | %     | SABIC Method |
| Mold Shrinkage, flow, 2.3-4.6 mm             | 1.5 - 2.3 | %     | SABIC Method |
| Mold Shrinkage, xflow, 0.75-2.3 mm           | 1 - 1.7   | %     | SABIC Method |
| Mold Shrinkage, xflow, 2.3-4.6 mm            | 1.6 - 2.4 | %     | SABIC Method |
| Melt Viscosity                               | 0         | Pa-s  | SABIC Method |

Source GMD, last updated:11/21/2003

## **Processing**

| Parameter                   |           |      |  |  |
|-----------------------------|-----------|------|--|--|
| Compounding Extrusion       | Value     | Unit |  |  |
| Drying Temperature          | 110 - 120 | °C   |  |  |
| Drying Time                 | 4 - 6     | hrs  |  |  |
| Drying Time (Cumulative)    | 8         | hrs  |  |  |
| Maximum Moisture Content    | 0         | %    |  |  |
| Melt Temperature            | 245 - 260 | °C   |  |  |
| Barrel - Zone 1 Temperature | 200 - 230 | °C   |  |  |
| Barrel - Zone 2 Temperature | 240 - 255 | °C   |  |  |
| Barrel - Zone 3 Temperature | 240 - 275 | °C   |  |  |
| Barrel - Zone 4 Temperature | 240 - 275 | °C   |  |  |
| Adapter Temperature         | 240 - 275 | °C   |  |  |
| Die Temperature             | 240 - 275 | °C   |  |  |
| Waterbath Temperature       | 25 - 35   | °C   |  |  |

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

## PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

- (1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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