

## TES J-1200/20

Techmer Polymer Modifiers - *Acrylonitrile Butadiene Styrene*

### General Information

#### Product Description

Molding Parameters:

For 2-zone machines, the rear temperature is 450-520°F, and the front temperature is 420-470°F.

#### General

|                           |                                                                                      |
|---------------------------|--------------------------------------------------------------------------------------|
| Material Status           | • Commercial: Active                                                                 |
| Availability              | • Africa & Middle East • Europe • North America<br>• Asia Pacific • Latin America    |
| Filler / Reinforcement    | • Glass Fiber, 20% Filler by Weight                                                  |
| Features                  | • Good Dimensional Stability                                                         |
| RoHS Compliance           | • RoHS Compliant                                                                     |
| Automotive Specifications | • STELLANTIS MS-DB-435 • STELLANTIS MS-DB-435<br>CPN2439 Color: BK2089 Black CPN3350 |
| Forms                     | • Pellets                                                                            |
| Processing Method         | • Injection Molding                                                                  |

### Properties <sup>1</sup>

| Physical                                                | Nominal Value | Unit     | Test Method |
|---------------------------------------------------------|---------------|----------|-------------|
| Density / Specific Gravity                              | 1.23          |          | ASTM D792   |
| Molding Shrinkage - Flow                                |               |          | ASTM D955   |
| 0.125 in                                                | 3.0E-3        | in/in    |             |
| 0.250 in                                                | 3.0E-3        | in/in    |             |
| Water Absorption (24 hr)                                | 0.30          | %        | ASTM D570   |
| Mechanical                                              | Nominal Value | Unit     | Test Method |
| Tensile Modulus (73°F)                                  | 900000        | psi      | ASTM D638   |
| Tensile Strength (Break, 73°F)                          | 12000         | psi      | ASTM D638   |
| Tensile Elongation (Break, 73°F)                        | 2.0           | %        | ASTM D638   |
| Flexural Modulus (73°F)                                 | 850000        | psi      | ASTM D790   |
| Flexural Strength (Break, 73°F)                         | 16000         | psi      | ASTM D790   |
| Impact                                                  | Nominal Value | Unit     | Test Method |
| Notched Izod Impact (73°F, 0.125 in)                    | 1.5           | ft·lb/in | ASTM D256   |
| Hardness                                                | Nominal Value | Unit     | Test Method |
| Rockwell Hardness (M-Scale)                             | 75            |          | ASTM D785   |
| Thermal                                                 | Nominal Value | Unit     | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed)  | 225           | °F       | ASTM D648   |
| Deflection Temperature Under Load (264 psi, Unannealed) | 210           | °F       | ASTM D648   |
| RTI Elec                                                |               |          | UL 746B     |
| 0.06 in                                                 | 140           | °F       |             |
| 0.12 in                                                 | 140           | °F       |             |
| 0.24 in                                                 | 140           | °F       |             |
| RTI Imp                                                 |               |          | UL 746B     |
| 0.06 in                                                 | 140           | °F       |             |
| 0.12 in                                                 | 140           | °F       |             |
| 0.24 in                                                 | 140           | °F       |             |
| RTI Str                                                 |               |          | UL 746B     |
| 0.06 in                                                 | 140           | °F       |             |
| 0.12 in                                                 | 140           | °F       |             |
| 0.24 in                                                 | 140           | °F       |             |

#### Flammability

Nominal Value Unit Test Method



|              |       |
|--------------|-------|
| Flame Rating | UL 94 |
| 0.06 in      | HB    |
| 0.12 in      | HB    |
| 0.24 in      | HB    |

| Processing Information |               |      |
|------------------------|---------------|------|
| Injection              | Nominal Value | Unit |
| Drying Temperature     | 160           | °F   |
| Drying Time            | 1.0           | hr   |
| Rear Temperature       | 420 to 450    | °F   |
| Middle Temperature     | 430 to 460    | °F   |
| Front Temperature      | 410 to 430    | °F   |
| Nozzle Temperature     | 390 to 430    | °F   |
| Processing (Melt) Temp | 450 to 500    | °F   |
| Mold Temperature       | 160 to 190    | °F   |

| Notes                                                                             |  |  |
|-----------------------------------------------------------------------------------|--|--|
| <sup>1</sup> Typical properties: these are not to be construed as specifications. |  |  |

