



## TERINE TS2050FR

**Product Description** PPA with 50% glass fiber reinforced, flame retardant, used for the automotive industry, Electrical and Electronics and consumer applications.

**Material Status** Commercial: Active.

**Availability** Africa & Middle East, Asia Pacific, Europe, Latin America, North America.

**Features** High temperature resistance, High rigidity, high mechanical strength, high impact and easy processing with good appearance.

**Processing Method** Injection Molding.

Physical	Nominal Value	Unit	Test Method
Specific gravity	1.63	g/cm <sup>3</sup>	ISO 1183
Water absorption (24 hr)	3	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile modulus	19200	MPa	ISO 527-1/-2
Tensile strength, break	200	MPa	ISO 527-1/-2
Tensile elongation, break	1.5	%	ISO 527-1/-2
Flexural modulus	16200	MPa	ISO 178
Flexural strength	310	MPa	ISO 178
Charpy impact strength	58	KJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength	13	KJ/m <sup>2</sup>	ISO 179/1eA
Thermal	Nominal Value	Unit	Test Method
HDT, 1.8 MPa under load	240	°C	ISO 75-1/-2
HDT, 0.45 MPa under load	261	°C	ISO 75-1/-2
Temperature range	140	°C	ISO 11359-1/-2
Flammability	Nominal Value	Unit	Test Method
According UL standard	V-0	Class	UL 94
Electrical	Nominal Value	Unit	Test Method
CTI	600	V	IEC 60112
Dielectric strength	30	KV/mm	IEC 60243
Volume resistivity	10 <sup>11</sup>	Ω·m	IEC 60093
Surface resistivity	10 <sup>12</sup>	Ω	IEC 60093
Injection	Nominal Value	Unit	Test Method
Melting point, DSC	320	°C	ISO 11357
Melt temperature range, Injection molding/extrusion	320-360	°C	
Mold temperature range	90-149	°C	



## TERINE PPA-TS2050FR

### **Disclaimer**

#### **Sales products:**

This information and technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved.

Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating TENSURE materials or products will be safe and suitable for use under end-use conditions.

Our products are sold and our advisory service is given in accordance with the current version of our General Conditions of Sale and Delivery.

#### **Test figures:**

Above figures were measured under the condition of 23 °C and RH 50% base on injection molded specimens .They are typical figures, not specifications.

Kindly note that, under certain conditions,

The properties can be affected to a considerable extent by the design of the mould/die, the processing conditions and coloring.

To preclude any risk to the health and well-being of the machine operatives, tolerance limits for the work environment must be ensured by the provision of efficient exhaust ventilation and fresh air at the workplace.

The prescribed processing temperatures should not be substantially exceeded.

Since excessively high temperatures are generally the result of operator error or defects in the heating system, special care and controls are essential in these areas.