



# LOXISTER PBT FRV0 GF30 02029 | PBT

# TECHNICAL DATASHEET PROVISIONAL

## DESCRIPTION

LOXISTER PBT FRV0 GF30 02029 is an injection moulding grade of flame retardant, 30% glass fibre reinforced Polybutylene Terephthalate.

#### **FEATURES**

- Excellent Dimensional Stability
- Good Flame Retardant Characteristics.
- Good Toughness and Stiffness
- Excellent Heat and Chemical & Abrasion resistance
- Good Flow Characteristic Finish

# **APPLICATIONS**

- Automotive Windshield Wiper Arms
- Miniature Circuit Board (MCB) Housing
- Cooling Fans
- Electric Motor Housing
- Bobbins
- Switch Board Housings

| PROPERTY, Test Conditions                | Standard       | Unit              | Value |
|--|----------------|-------------------|-------|
| MECHANICAL                               |                |                   |       |
| Tensile Strength at Break                | ISO 527        | MPa               | 110   |
| Elongation at Break                      | ISO 527        | MPa               | 4     |
| Flexural Strength                        | ISO 178        | MPa               | 175   |
| Flexural Modulus                         | ISO 178        | MPa               | 8500  |
| IMPACT                                   |                |                   |       |
| Izod notched Impact (23°C)               | ISO 180        | kJ/m²             | 7     |
| THERMAL                                  |                |                   |       |
| Heat Deflection Temperature at 1.8 MPa   | ISO 75         | °C                | 200   |
| Heat Deflection Temperature at 0.455 MPa | ISO 75         | °C                | 215   |
| PHYSICAL                                 |                |                   |       |
| Density                                  | ISO 1183       | g/cm <sup>3</sup> | 1.66  |
| Ash Content                              | ASTM D5630     | %                 | 30    |
| FLAMMABILITY                             |                |                   |       |
| Glow Wire Flammability Index (GWFI),1mm  | IEC 60695-2-12 | °C                | 960   |
| Flammability Rating at 1.6 mm thickness  | UL 94          | -                 | V0    |

| PROCESSING            | Unit | Value     |
|-----------------------|------|-----------|
| PARAMETER             |      |           |
| Max. Moisture Content | %    | 0.04      |
| Drying Temperature    | °C   | 100 – 120 |
| Drying Time           | hrs  | 4         |
| Melt Temperature      | °C   | 250 – 270 |
| Mold Temperature      | °C   | 60 - 100  |

# DISCLAIMER

## GENERAL INFORMATION

The information specified on this product data sheet and the accompanying safety data sheet correspond to our current level of understanding and experience.

The user/processor bears responsibility for ensuring that the product described here is suited for the intended applications and that the application/processing complies with the necessary statutory provisions. The user/processor is to ensure that he/she is in possession of the current version of the product data sheet and the safety data sheet. This can be requested from the account manager known to the user/processor.

We prohibit the complete or partial adoption of information and formulations from this product data sheet.

#### PRODUCT PROPERTIES

The indicated test values represent approximate values but are not binding maximum or minimum values. It is possible that the values may be influenced or may deviate due to tool design, processing conditions, etc. The test values do not represent any contractual assurances regarding the properties or the suitability of the product for a specific intended application.

All of the information, approximate values, descriptions, drawings, etc. included in the product data sheet can change at any time and do not represent any contractually agreed properties of our product.

#### PRODUCT SAFETY

As long as the processing of our product is carried out in compliance with the processing instructions specified in the product data sheet, molten masses are thermally stable and are not a source of any danger due to molecular decomposition or the formation of gases or vapor.

According to the safety data sheet the user/processor is to ensure compliance with the specified occupational exposure limits through sufficient exhaust and ventilation in order to avoid any negative impact on the health and well-being of his/her employees. If processing is carried out at temperatures significantly below the specified processing temperatures then gaseous products of decomposition can form as a result of the partial decomposition of the polymer. Further information about this can be found in the safety data sheet.

## PRODUCT PROCESSING

The application, use and processing as well as further processing of our products and of products manufactured by the user/processor is carried out beyond the scope of our control and is the sole responsibility of the user/processor. The user/processor is to conduct his/her own tests and studies regarding the suitability of the product described here for the intended applications.

Please note that our products are not suited for use with or the processing of medical products.

Revision: December 2018

## **LOXIM INDUSTRIES LIMITED**

