

## Polyester-based TPU

### ■ Features

Abrasion Resistance, Slip Resistance, Low Temperature Flexibility, Favorable Hand Feeling.

### ■ Applications

Over Molding, Compounding, Tube, Conveyor Belt, Injection etc.

Properties

| Properties                   | Standard   | Unit              | Value       |
|------------------------------|------------|-------------------|-------------|
| <b>Physical Properties</b>   |            |                   |             |
| <b>Density</b>               | ASTM D792  | g/cm <sup>3</sup> | <b>1.18</b> |
| <b>Hardness</b>              | ASTM D2240 | Shore A           | <b>67</b>   |
| <b>Mechanical Properties</b> |            |                   |             |
| <b>Tensile Strength</b>      | ASTM D412  | MPa               | <b>20</b>   |
| <b>100% Modulus</b>          | ASTM D412  | MPa               | <b>3</b>    |
| <b>300% Modulus</b>          | ASTM D412  | MPa               | <b>5</b>    |
| <b>Elongation at Break</b>   | ASTM D412  | %                 | <b>750</b>  |
| <b>Tear Strength</b>         | ASTM D624  | KN/m              | <b>65</b>   |
| <b>Abrasion</b>              | DIN 53516  | mm <sup>3</sup>   | <b>80</b>   |
| <b>Thermal Properties</b>    |            |                   |             |
| <b>Tg (DSC,10°C/min)</b>     | DSC        | °C                | <b>- 42</b> |

Note: The above values are shown as typical values and should not be used as specifications.

Package: Normally 25kg/bag

### ■ Processing Guide

For optimum results, previous drying of the product during 6-8hours at 70-80°C is advisable, in a desiccant-air dryer. The suggested processing-temperature profiles for injection & extrusion are depicted in the figure below.

#### INJECTION:

| ZONES                  | Set Value |
|------------------------|-----------|
| <b>NOZZLE (°C)</b>     | 195       |
| <b>METERING(°C)</b>    | 190       |
| <b>COMPRESSION(°C)</b> | 185       |
| <b>FEEDING(°C)</b>     | 180       |
| <b>PRESSURE(KG)</b>    | 65        |

#### EXTRUSION:

| ZONES                  | Set Value |
|------------------------|-----------|
| <b>DIE(°C)</b>         | 180       |
| <b>ADAPTOR(°C)</b>     | 185       |
| <b>METERING(°C)</b>    | 180       |
| <b>COMPRESSION(°C)</b> | 175       |
| <b>FEEDING(°C)</b>     | 170       |

### ■ Environmental & Healthy & Safety

Take MSDS for reference.

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The information provided here is for reference only. The specification will be provided in the quality certificate or in the contract. It is the user's responsibility to test the material and its suitability for a process. We have no control over what another party does with the material and we cannot take any responsibility for another party's action. Nor will we be responsible for any indirect damages while using our products. The user is welcome to contact our customer and technical service center with questions on our products.