



# Sarlink® TPE ME-2365B (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

## General Information

### Product Description

The Sarlink ME-2300 Series is a high performance thermoplastic elastomer series, available in BLK, designed for automotive exterior molded applications. Sarlink ME-2365B is a medium hardness, low density, UV stabilized, high flow grade delivering excellent aesthetics and faster injection molding cycle times.

### General

|                   |                                                                                                                   |                                                                                              |                                                             |
|-------------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| Material Status   | • Preliminary Data                                                                                                |                                                                                              |                                                             |
| Availability      | • Africa & Middle East<br>• Asia Pacific                                                                          | • Europe<br>• Latin America                                                                  | • North America                                             |
| Features          | • Chemical Resistant<br>• Fast Molding Cycle<br>• Good Adhesion<br>• Good Processability<br>• Good Surface Finish | • High Flow<br>• Light Stabilized<br>• Low Density<br>• Low Specific Gravity<br>• Lubricated | • Medium Hardness<br>• Sunlight Resistant<br>• UV Resistant |
| Uses              | • Automotive Applications<br>• Automotive Exterior Parts                                                          | • Automotive Exterior Trim<br>• Rubber Replacement                                           |                                                             |
| RoHS Compliance   | • RoHS Compliant                                                                                                  |                                                                                              |                                                             |
| Appearance        | • Black                                                                                                           |                                                                                              |                                                             |
| Forms             | • Pellets                                                                                                         |                                                                                              |                                                             |
| Processing Method | • Injection Molding                                                                                               |                                                                                              |                                                             |

## ASTM & ISO Properties <sup>1</sup>

| Physical                                  | Nominal Value | Unit              | Test Method |
|-------------------------------------------|---------------|-------------------|-------------|
| Density                                   | 0.890         | g/cm <sup>3</sup> | ISO 1183    |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 15            | g/10 min          | ASTM D1238  |
| Elastomers                                | Nominal Value | Unit              | Test Method |
| Tensile Stress <sup>2</sup>               |               |                   | ISO 37      |
| Across Flow : 100% Strain                 | 247           | psi               |             |
| Flow : 100% Strain                        | 290           | psi               |             |
| Tensile Stress <sup>2</sup>               |               |                   | ISO 37      |
| Across Flow : Break                       | 1520          | psi               |             |
| Flow : Break                              | 841           | psi               |             |
| Tensile Elongation <sup>2</sup>           |               |                   | ISO 37      |
| Across Flow : Break                       | 880           | %                 |             |
| Flow : Break                              | 710           | %                 |             |
| Tear Strength <sup>3</sup>                |               |                   | ISO 34-1    |
| Across Flow                               | 160           | lbf/in            |             |
| Flow                                      | 150           | lbf/in            |             |
| Compression Set <sup>4</sup>              |               |                   | ISO 815     |
| 73°F, 22 hr                               | 24            | %                 |             |
| 158°F, 22 hr                              | 39            | %                 |             |
| 194°F, 70 hr                              | 63            | %                 |             |
| Hardness                                  | Nominal Value | Unit              | Test Method |
| Shore Hardness                            |               |                   | ISO 868     |
| Shore A, 1 sec, Injection Molded          | 69            |                   |             |
| Shore A, 5 sec, Injection Molded          | 65            |                   |             |
| Shore A, 15 sec, Injection Molded         | 64            |                   |             |

# Sarlink® TPE ME-2365B (PRELIMINARY DATA)

## Teknor Apex Company - Thermoplastic Elastomer

| Aging                                                               | Nominal Value | Unit | Test Method |
|---------------------------------------------------------------------|---------------|------|-------------|
| Change in Tensile Strength in Air - Across Flow <sup>5</sup>        |               |      | ISO 188     |
| 230°F, 1008 hr                                                      | -9.8          | %    |             |
| 100% Strain 230°F, 1008 hr                                          | 13            | %    |             |
| 257°F, 168 hr                                                       | -11           | %    |             |
| 100% Strain 257°F, 168 hr                                           | 15            | %    |             |
| Change in Tensile Strain at Break in Air - Across Flow <sup>5</sup> |               |      | ISO 188     |
| 230°F, 1008 hr                                                      | 1.3           | %    |             |
| 257°F, 168 hr                                                       | -1.3          | %    |             |
| Change in Shore Hardness in Air <sup>6</sup>                        |               |      | ISO 188     |
| Shore A, 230°F, 1008 hr                                             | 2.8           |      |             |
| Shore A, 257°F, 168 hr                                              | 1.7           |      |             |
| Fill Analysis                                                       | Nominal Value | Unit | Test Method |
| Apparent Viscosity (392°F, 206 sec <sup>-1</sup> )                  | 134           | Pa·s | ASTM D3835  |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Rear Temperature       | 390 to 410    | °F   |
| Middle Temperature     | 400 to 420    | °F   |
| Front Temperature      | 410 to 430    | °F   |
| Nozzle Temperature     | 420 to 440    | °F   |
| Processing (Melt) Temp | 420 to 440    | °F   |
| Mold Temperature       | 95 to 150     | °F   |
| Injection Pressure     | 200 to 1000   | psi  |
| Injection Rate         | Fast          |      |
| Back Pressure          | 25.0 to 125   | psi  |
| Screw Speed            | 50 to 120     | rpm  |
| Cushion                | 0.150 to 1.00 | in   |

### Injection Notes

Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 150°F (65°C).

### Notes

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

<sup>2</sup> Type 1, 20 in/min

<sup>3</sup> Method Ba, Angle (Unnicked), 20 in/min

<sup>4</sup> Type A

<sup>5</sup> Type 1

<sup>6</sup> 5 sec