



# Sarlink® TPV 10035B

Teknor Apex Company - Thermoplastic Vulcanizate

## General Information

### Product Description

Sarlink TPV 10035B is a high performance thermoplastic vulcanizate used in automotive applications. Sarlink TPV 10035B is a low hardness, low density, RoHS compliant grade exhibiting superior compression set and chemical resistance. This grade is suitable for extrusion processing.

### General

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material Status           | • Commercial: Active                                                                                                                                                                                                                                                                                                                                                                                                 |
| Availability              | <ul style="list-style-type: none"> <li>• Asia Pacific</li> <li>• Europe</li> <li>• Latin America</li> <li>• North America</li> </ul>                                                                                                                                                                                                                                                                                 |
| Features                  | <ul style="list-style-type: none"> <li>• Chemical Resistant</li> <li>• Good Adhesion</li> <li>• Good Color Stability</li> <li>• Good Processability</li> <li>• Good Weather Resistance</li> <li>• High Heat Resistance</li> <li>• Low Compression Set</li> <li>• Low Density</li> <li>• Low Fogging</li> <li>• Low Hardness</li> <li>• Low Specific Gravity</li> <li>• Lubricated</li> <li>• UV Resistant</li> </ul> |
| Uses                      | • Automotive Exterior Parts                                                                                                                                                                                                                                                                                                                                                                                          |
| RoHS Compliance           | • RoHS Compliant                                                                                                                                                                                                                                                                                                                                                                                                     |
| Automotive Specifications | • NISSAN Unspecified Color: Black                                                                                                                                                                                                                                                                                                                                                                                    |
| Appearance                | • Black                                                                                                                                                                                                                                                                                                                                                                                                              |
| Forms                     | • Pellets                                                                                                                                                                                                                                                                                                                                                                                                            |
| Processing Method         | • Injection Molding                                                                                                                                                                                                                                                                                                                                                                                                  |

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

| Physical                                 | Nominal Value | Unit              | Test Method |
|------------------------------------------|---------------|-------------------|-------------|
| Density                                  | 0.897         | g/cm <sup>3</sup> | ISO 1183    |
| Mechanical                               | Nominal Value | Unit              | Test Method |
| Coefficient of Friction                  | 0.80 to 0.90  |                   | ASTM D1894  |
| Elastomers                               | Nominal Value | Unit              | Test Method |
| Tensile Stress                           |               |                   | ISO 37      |
| Across Flow : 100% Strain                | 116           | psi               |             |
| Flow : 100% Strain                       | 197           | psi               |             |
| Tensile Stress                           |               |                   | ISO 37      |
| Across Flow : Break                      | 319           | psi               |             |
| Flow : Break                             | 348           | psi               |             |
| Tensile Elongation                       |               |                   | ISO 37      |
| Across Flow : Break                      | 380           | %                 |             |
| Flow : Break                             | 290           | %                 |             |
| Tear Strength - Across Flow <sup>2</sup> | 60.0          | lbf/in            | ISO 34-1    |
| Compression Set                          |               |                   | ISO 815     |
| 73°F, 22 hr                              | 12            | %                 |             |
| 158°F, 22 hr                             | 21            | %                 |             |
| 257°F, 70 hr                             | 42            | %                 |             |
| Hardness                                 | Nominal Value | Unit              | Test Method |
| Shore Hardness                           |               |                   | ISO 868     |
| Shore A, 5 sec, Extruded                 | 34            |                   |             |
| Shore A, 5 sec, Injection Molded         | 36            |                   |             |

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| Aging                                                  | Nominal Value | Unit | Test Method |
|--------------------------------------------------------|---------------|------|-------------|
| Change in Tensile Strength in Air - Across Flow        |               |      | ISO 188     |
| 275°F, 1008 hr                                         | 11            | %    |             |
| 100% Strain 275°F, 1008 hr                             | -6.8          | %    |             |
| 302°F, 168 hr                                          | -3.7          | %    |             |
| 100% Strain 302°F, 168 hr                              | -12           | %    |             |
| Change in Tensile Strain at Break in Air - Across Flow |               |      | ISO 188     |
| 275°F, 1008 hr                                         | 44            | %    |             |
| 302°F, 168 hr                                          | 17            | %    |             |
| Change in Shore Hardness in Air                        |               |      | ISO 188     |
| Shore A, 275°F, 1008 hr                                | 1.0           |      |             |
| Shore A, 302°F, 168 hr                                 | -2.7          |      |             |
| Change in Volume (257°F, 70 hr, in IRM 903 Oil)        | 100           | %    | ISO 1817    |
| Fill Analysis                                          | Nominal Value | Unit | Test Method |
| Apparent Viscosity (392°F, 206 sec <sup>-1</sup> )     | 128           | Pa·s | ASTM D3835  |

| Processing Information |               |      |  |
|------------------------|---------------|------|--|
| Injection              | Nominal Value | Unit |  |
| Rear Temperature       | 356 to 401    | °F   |  |
| Middle Temperature     | 356 to 401    | °F   |  |
| Front Temperature      | 356 to 401    | °F   |  |
| Nozzle Temperature     | 365 to 410    | °F   |  |
| Processing (Melt) Temp | 365 to 410    | °F   |  |
| Mold Temperature       | 50 to 131     | °F   |  |
| Back Pressure          | 14.5 to 145   | psi  |  |
| Screw Speed            | 100 to 200    | rpm  |  |

Notes

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

<sup>2</sup> Method Ba, Angle (Unnicked)