



# Sarlink® TPV X5735B

Teknor Apex Company - Thermoplastic Vulcanizate

## General Information

### Product Description

The Sarlink TPV 5700B series are highly engineered extrusion-grade thermoplastic vulcanizates with outstanding UV stability designed for demanding automotive interior and exterior sealing applications, including glass run channels, waistbelts, weather strips, seals and other profiles. Sarlink TPV X5735B is a low hardness, low density, high performance grade with low fogging and excellent color retention and elastic properties.

### General

|                           |                                                                             |                                                                                  |                                                          |
|---------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------|
| Material Status           | • Commercial: Active                                                        |                                                                                  |                                                          |
| Availability              | • Africa & Middle East<br>• Asia Pacific                                    | • Europe<br>• Latin America                                                      | • North America                                          |
| Features                  | • Chemical Resistant<br>• Good Processability<br>• Low Density              | • Low Hardness<br>• Low Specific Gravity<br>• Resilient                          | • UV Resistant                                           |
| Uses                      | • Automotive Applications                                                   | • Automotive Exterior Parts                                                      | • Rubber Replacement                                     |
| RoHS Compliance           | • RoHS Compliant                                                            |                                                                                  |                                                          |
| Automotive Specifications | • CHRYSLER MS-AR-100 IGV<br>Color: Black<br>• FORD Unspecified Color: Black | • GM GMN3927 Color: Black<br>• GM GMW15812P-TPV<br>(EPDM+PP) Type 2 Color: Black | • VAG VW82034 Color: Black<br>• VAG VW91101 Color: Black |
| Appearance                | • Black                                                                     |                                                                                  |                                                          |

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

| Physical                                 | Nominal Value | Unit              | Test Method |
|------------------------------------------|---------------|-------------------|-------------|
| Specific Gravity                         | 0.930         |                   | ASTM D792   |
| Density                                  | 0.930         | g/cm <sup>3</sup> | ISO 1183    |
| Elastomers                               | Nominal Value | Unit              | Test Method |
| Tensile Stress                           |               |                   | ASTM D412   |
| Across Flow : 100% Strain                | 116           | psi               |             |
| Flow : 100% Strain                       | 247           | psi               |             |
| Tensile Stress                           |               |                   | ISO 37      |
| Across Flow : 100% Strain                | 116           | psi               |             |
| Flow : 100% Strain                       | 247           | psi               |             |
| Tensile Strength                         |               |                   | ASTM D412   |
| Across Flow : Break                      | 479           | psi               |             |
| Flow : Break                             | 377           | psi               |             |
| Tensile Stress                           |               |                   | ISO 37      |
| Across Flow : Break                      | 479           | psi               |             |
| Flow : Break                             | 377           | psi               |             |
| Tensile Elongation                       |               |                   | ASTM D412   |
| Across Flow : Break                      | 530           | %                 |             |
| Flow : Break                             | 210           | %                 |             |
| Tensile Elongation                       |               |                   | ISO 37      |
| Across Flow : Break                      | 530           | %                 |             |
| Flow : Break                             | 210           | %                 |             |
| Tear Strength - Across Flow              | 57.0          | lbf/in            | ASTM D624   |
| Tear Strength - Across Flow <sup>2</sup> | 57            | lbf/in            | ISO 34-1    |
| Compression Set                          |               |                   | ASTM D395   |
| 73°F, 22 hr                              | 12            | %                 |             |
| 158°F, 22 hr                             | 23            | %                 |             |
| 257°F, 70 hr                             | 42            | %                 |             |

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| Elastomers                                             | Nominal Value | Unit | Test Method |
|--------------------------------------------------------|---------------|------|-------------|
| Compression Set                                        |               |      | ISO 815     |
| 73°F, 22 hr                                            | 12            | %    |             |
| 158°F, 22 hr                                           | 23            | %    |             |
| 257°F, 70 hr                                           | 42            | %    |             |
| Hardness                                               | Nominal Value | Unit | Test Method |
| Durometer Hardness                                     |               |      | ASTM D2240  |
| Shore A, 5 sec, Extruded                               | 34            |      |             |
| Shore A, 5 sec, Injection Molded                       | 36            |      |             |
| Shore Hardness                                         |               |      | ISO 868     |
| Shore A, 5 sec, Extruded                               | 34            |      |             |
| Shore A, 5 sec, Injection Molded                       | 36            |      |             |
| Aging                                                  | Nominal Value | Unit | Test Method |
| Change in Tensile Strength in Air - Across Flow        |               |      | ASTM D573   |
| 275°F, 1000 hr                                         | -5.0          | %    |             |
| 100% Strain, 275°F, 1000 hr                            | 4.0           | %    |             |
| 302°F, 168 hr                                          | 2.0           | %    |             |
| 100% Strain, 302°F, 168 hr                             | 8.0           | %    |             |
| Change in Tensile Strength in Air - Across Flow        |               |      | ISO 188     |
| 275°F, 1000 hr                                         | -5.0          | %    |             |
| 100% Strain 275°F, 1000 hr                             | 4.0           | %    |             |
| 302°F, 168 hr                                          | 2.0           | %    |             |
| 100% Strain 302°F, 168 hr                              | 8.0           | %    |             |
| Change in Ultimate Elongation in Air - Across Flow     |               |      | ASTM D573   |
| 275°F, 1000 hr                                         | 15            | %    |             |
| 302°F, 168 hr                                          | 12            | %    |             |
| Change in Tensile Strain at Break in Air - Across Flow |               |      | ISO 188     |
| 275°F, 1000 hr                                         | 15            | %    |             |
| 302°F, 168 hr                                          | 12            | %    |             |
| Change in Durometer Hardness in Air                    |               |      | ASTM D573   |
| Shore A, 275°F, 1000 hr                                | 0.0           |      |             |
| Shore A, 302°F, 168 hr                                 | 1.0           |      |             |
| Change in Shore Hardness in Air                        |               |      | ISO 188     |
| Shore A, 275°F, 1000 hr                                | 0.0           |      |             |
| Shore A, 302°F, 168 hr                                 | 1.0           |      |             |
| Change in Volume (257°F, 70 hr, in IRM 903 Oil)        | 110           | %    | ASTM D471   |
| Change in Volume (257°F, 70 hr, in IRM 903 Oil)        | 110           | %    | ISO 1817    |
| Additional Information                                 | Nominal Value | Unit | Test Method |
| Apparent Shear Viscosity - Capillary @ 206/s           |               |      |             |
| 392°F                                                  | 210           | Pa·s | ISO 11443   |
| 392°F                                                  | 210           | Pa·s | ASTM D3835  |