



Sarlink® TPE EE-2740D

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Sarlink TPE EE-2740D NAT is a high performance thermoplastic elastomer designed for automotive applications, including exterior trim. Sarlink TPE EE-2740D NAT is a high hardness low density extrusion grade that is light stabilized and sunlight resistant.

General

| | | | |
|---------------------------|--|--|---|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Features | • Bondability • Good Colorability • Good Melt Strength • Good Processability • Good Processing Stability | • Halogen Free • High Hardness • High Viscosity • Light Stabilized • Low Density | • Low Flow • Low Specific Gravity • Slip • Without Fillers |
| Uses | • Automotive Applications • Automotive Exterior Trim | | |
| RoHS Compliance | • RoHS Compliant | | |
| Automotive Specifications | • STELLANTIS MS-DC-242 CPN4707 ¹ | | |
| Appearance | • Colors Available | • Natural Color | • Translucent |
| Forms | • Pellets | | |
| Processing Method | • Extrusion | | |

ASTM & ISO Properties ²

| Physical | Nominal Value | Unit | Test Method |
|---|---------------|-------------------|-------------|
| Density | 0.900 | g/cm ³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 5.9 | g/10 min | ASTM D1238 |
| Mechanical | Nominal Value | Unit | Test Method |
| Flexural Modulus | 21400 | psi | ISO 178 |
| Elastomers | Nominal Value | Unit | Test Method |
| Tensile Stress | | | ASTM D412 |
| Across Flow : 100% Strain | 856 | psi | |
| Flow : 100% Strain | 972 | psi | |
| Tensile Strength | | | ASTM D412 |
| Across Flow : Break | 1190 | psi | |
| Flow : Break | 1310 | psi | |
| Tensile Elongation | | | ASTM D412 |
| Across Flow : Break | 590 | % | |
| Flow : Break | 520 | % | |
| Tear Strength - Across Flow | 354 | lbf/in | ASTM D624 |
| Compression Set | | | ASTM D395 |
| 73°F, 22 hr | 56 | % | |
| 158°F, 22 hr | 80 | % | |
| 194°F, 70 hr | 92 | % | |
| Hardness | Nominal Value | Unit | Test Method |
| Durometer Hardness | | | ASTM D2240 |
| Shore D, 1 sec, Injection Molded | 42 | | |
| Shore D, 5 sec, Injection Molded | 37 | | |

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| Aging | Nominal Value | Unit | Test Method |
|--|---------------|--------|-------------|
| Change in Tensile Strength in Air - Across Flow | | | ISO 188 |
| 230°F, 1008 hr | 6.1 | % | |
| 257°F, 168 hr | 9.8 | % | |
| Change in Tensile Strain at Break in Air - Across Flow | | | ISO 188 |
| 230°F, 1008 hr | -15 | % | |
| 257°F, 168 hr | -18 | % | |
| Change in Shore Hardness in Air | | | ISO 188 |
| 230°F, 1008 hr | -1.2 | | |
| Shore A, 257°F, 168 hr | 0.0 | | |
| Flammability | Nominal Value | Unit | Test Method |
| Burning Rate | 2.6 | in/min | ISO 3795 |
| Fill Analysis | Nominal Value | Unit | Test Method |
| Apparent Viscosity (392°F, 206 sec ⁻¹) | 454 | Pa·s | ASTM D3835 |

Additional Information

HEAT DISTORTION TEMP (0.45 MPa) - ASTM D648 = 58
XENON WEATHERING 2500 kJ (SAE J-1960) = 1.48 DELTA E.
MULTI-AXIAL IMPACT @-40C JOULES
GARDNER IMPACT @-30C in-lb (J) = 256

Processing Information

| Extrusion | Nominal Value | Unit |
|-----------------------|---------------|------|
| Cylinder Zone 1 Temp. | 380 to 400 | °F |
| Cylinder Zone 2 Temp. | 390 to 410 | °F |
| Cylinder Zone 3 Temp. | 400 to 420 | °F |
| Cylinder Zone 4 Temp. | 400 to 420 | °F |
| Cylinder Zone 5 Temp. | 410 to 430 | °F |
| Die Temperature | 420 to 440 | °F |

Extrusion Notes

Screw Speed: 30 to 100 rpm

Notes

¹ (Formerly approved under Tekron TK-1118M BLK 480)

² Typical properties: these are not to be construed as specifications.