



# Sarlink® TPE FM-2265 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

## General Information

### Product Description

Sarlink FM-2265 is a general purpose thermoplastic elastomer, available in NAT, BLK, and colors, designed for automotive interior applications, including floor mats. Sarlink FM-2265 is a UV stabilized, medium hardness, high density, wear-resistant, filled grade with excellent processability, good heat stability, and suitable for injection molding.

### General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Filled • Good Adhesion • Good Colorability • Good Processability • Good Toughness	• Heat Aging Resistant • High Density • High Specific Gravity • Low Friction • Lubricated • Medium Hardness	• Outstanding Surface Finish • Slip • UV Resistant • Wear Resistant
Uses	• Automotive Applications	• Automotive Interior Parts	• Rubber Replacement
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Injection Molding		

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

Physical	Nominal Value	Unit	Test Method
Density	1.08	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.50	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress <sup>2</sup>			ISO 37
Across Flow : 100% Strain	196	psi	
Flow : 100% Strain	285	psi	
Tensile Stress <sup>2</sup>			ISO 37
Across Flow : Break	1320	psi	
Flow : Break	933	psi	
Tensile Elongation <sup>2</sup>			ISO 37
Across Flow : Break	890	%	
Flow : Break	740	%	
Tear Strength <sup>3</sup>			ISO 34-1
Across Flow	140	lbf/in	
Flow	160	lbf/in	
Compression Set <sup>4</sup>			ISO 815
73°F, 22 hr	20	%	
158°F, 22 hr	38	%	
194°F, 70 hr	64	%	
257°F, 70 hr	80	%	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore A, 1 sec, Injection Molded	62		
Shore A, 5 sec, Injection Molded	60		
Shore A, 15 sec, Injection Molded	58		

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Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air <sup>5</sup>			ISO 188
Across Flow : 230°F, 1008 hr	3.2	%	
Flow : 230°F, 1008 hr	14	%	
Across Flow : 100% Strain 230°F, 1008 hr	10	%	
Flow : 100% Strain 230°F, 1008 hr	5.0	%	
Across Flow : 257°F, 168 hr	3.3	%	
Flow : 257°F, 168 hr	11	%	
Across Flow : 100% Strain 257°F, 168 hr	3.6	%	
Flow : 100% Strain 257°F, 168 hr	0.90	%	
Change in Tensile Strain at Break in Air <sup>5</sup>			ISO 188
Across Flow : 230°F, 1008 hr	-5.3	%	
Flow : 230°F, 1008 hr	0.80	%	
Across Flow : 257°F, 168 hr	1.4	%	
Flow : 257°F, 168 hr	6.0	%	
Change in Shore Hardness in Air			ISO 188
Shore A, 230°F, 1008 hr <sup>6</sup>	2.1		
Shore A, 230°F, 1008 hr <sup>7</sup>	3.6		
Shore A, 230°F, 1008 hr <sup>8</sup>	4.0		
Shore A, 257°F, 168 hr <sup>6</sup>	0.40		
Shore A, 257°F, 168 hr <sup>7</sup>	2.3		
Shore A, 257°F, 168 hr <sup>8</sup>	2.9		
<b>Fill Analysis</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Apparent Viscosity (392°F, 206 sec <sup>-1</sup> )	229	Pa·s	ASTM D3835

### Processing Information

Injection	Nominal Value	Unit
Rear Temperature	338 to 374	°F
Middle Temperature	347 to 383	°F
Front Temperature	356 to 401	°F
Nozzle Temperature	356 to 401	°F
Processing (Melt) Temp	356 to 401	°F
Mold Temperature	59 to 104	°F
Injection Rate	Moderate-Fast	
Back Pressure	25.0 to 125	psi
Screw Speed	50 to 100	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 176°F (80°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> 1 sec

<sup>7</sup> 5 sec

<sup>8</sup> 15 sec