

# Sarlink® TPV 10045B BLACK (PRELIMINARY DATA)

Thermoplastic Vulcanizate  
Teknor Apex Company

Message:

Sarlink TPV 10045B BLACK is a high performance thermoplastic vulcanizate used in automotive applications. Sarlink TPV 10045B BLACK is a medium hardness, low density, lubricated, UV resistant grade exhibiting superior compression set and chemical resistance. This grade is designed for injection molding.

General Information			
Features	Low Specific Gravity		
	Low compressive deformability		
	Low density		
	Good UV resistance		
	Good chemical resistance		
	Heat resistance, high		
	Lubrication		
	Medium hardness		
Uses	Application in Automobile Field		
	Automotive exterior parts		
	Rubber substitution		
RoHS Compliance	RoHS compliance		
Appearance	Black		
Forms	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Density	0.920	g/cm³	ISO 1183
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ISO 868
Shaw A, 5 seconds, extruded	45		ISO 868
Shore A, 5 seconds, injection molding	48		ISO 868
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ISO 37
Transverse flow: 100% strain	2.00	MPa	ISO 37
Flow: 100% strain	1.20	MPa	ISO 37
Tensile Stress			ISO 37
Transverse flow: Fracture	2.90	MPa	ISO 37

Flow: Fracture	3.20	MPa	ISO 37
Tensile Elongation			ISO 37
Transverse flow: Fracture	280	%	ISO 37
Flow: Fracture	450	%	ISO 37
Tear Strength - Across Flow <sup>1</sup>	14	kN/m	ISO 34-1
Compression Set			ISO 815
23°C, 22 hr	17	%	ISO 815
70°C, 22 hr	24	%	ISO 815
125°C, 70 hr	46	%	ISO 815
<b>Aging</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Change in Tensile Strength in Air - Across Flow			ISO 188
135°C, 1008 hr	-10	%	ISO 188
100% strain 135°C, 1008 hr	2.0	%	ISO 188
150°C, 168 hr	-15	%	ISO 188
100% strain 150°C, 168 hr	-5.0	%	ISO 188
Changes in tensile stress upon fracture in air-Transverse flow			ISO 188
135°C, 1008 hr	-1.0	%	ISO 188
150°C, 168 hr	-10	%	ISO 188
Change in Shore Hardness in Air			ISO 188
Shao A, 135°C, 1008 hr	2.0		ISO 188
Shao A, 150°C, 168 hr	0.0		ISO 188
Change in Volume (125°C, 70 hr, in IRM 903 Oil)	78	%	ISO 1817
<b>Fill Analysis</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Apparent Viscosity (200°C, 206 sec <sup>-1</sup> )	125	Pa · s	ASTM D3835
<b>Legal statement</b>			
<p>The information and recommendations contained in this bulletin are, to the best of our knowledge, accurate and reliable but no guarantee of their accuracy is made. All products are sold upon condition that purchasers shall make their own tests to determine the suitability of such products for their particular purposes and uses and purchaser assumes all risks and liability for the results of use of the products, including use in accordance with seller's recommendations. Nothing in this bulletin constitutes permission or a recommendation to practice or use any invention covered by any patent owned by this company or others. There is no warranty of merchantability and there are no other warranties for the products described. For detailed Product Stewardship information, please contact us. Any product of Teknor Apex, including product names, shall not be used or tested in medical or food contact applications without the prior written acknowledgement of Teknor Apex as to the intended use. Please note that some products may not be available in one or more countries.</p>			
<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>	
Rear Temperature	180 - 205	°C	
Middle Temperature	180 - 205	°C	
Front Temperature	180 - 205	°C	
Nozzle Temperature	185 - 210	°C	
Processing (Melt) Temp	185 - 210	°C	
Mold Temperature	10 - 55	°C	
Back Pressure	0.100 - 1.00	MPa	
Screw Speed	100 - 200	rpm	

## NOTE

1. Method B, right-angle specimen  
(without cut)

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

### Recommended distributors for this material

## Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

