Geon™ Vinyl Flexible 90451

Flexible Polyvinyl Chloride

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Low Gloss		
Uses	• Automotive Applications	• Automotive Interior Trim	
Automotive Specifications	• FORD WSB-M4D871-A3	• SUBARU Unspecified	
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.29	1.29	ASTM D792
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Strength [2] (Break)	1940 psi	13.4 MPa	ASTM D638
Tensile Elongation [2] (Break)	350 %	350 %	ASTM D638
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tear Strength [3]	320 lbf/in	56.0 kN/m	ASTM D624
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore A, 15 sec)	72	72	ASTM D2240
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Brittleness Temperature	-29.2 °F	-34.0 °C	ASTM D746
Cold Flexibility [4]			GM 9503P
-20°F (-29°C), 75.0 mil (1.91 mm)	Pass	Pass	
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Automotive Burn Test	0 in/min	0 mm/min	FMVSS 302
Fogging			SAE J1756
-- [5]	90 %	90 %	
-- [6]	88 %	88 %	
Additional Information	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Xenon Weatherometer [7]	Pass	Pass	SAE J1960

Note: Automotive OEM approval(s).

Notes

[1] Typical values are not to be construed as specifications.

[2] Type IV, 20 in/min (510 mm/min)

[3] Die C, 20 in/min (510 mm/min)

[4] 25 mm, 4 hr

[5] 3 hrs, 212°F(100°C), 70°F(21°C), after 1 hour

[6] 6 hrs, 203°F(95°C), 100°F(38°C), after 16 hours

[7] Interior, 602 kJ/m², All Colors, dE*<3.0