



KRATON® G7705 GI-B

Kraton Polymers LLC - Styrene Ethylene Butylene Styrene Block Copolymer

Friday, December 18, 2015

General Information

Product Description

Kraton G7705 GI-B is an easy processing, general purpose 44 Shore A hardness material designed for a wide variety of applications. It is supplied from North America in the physical form identified below.

- Kraton G7705 GI-B- supplied as a dense, black pellet

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose • Good Processability	• High Heat Resistance • High Strength	• Ozone Resistant • Soft
Uses	• General Purpose		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	• Thermoforming

ASTM & ISO Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.15 to 1.25	1.15 to 1.25	Internal Method
Molding Shrinkage - Flow	0.017 in/in	1.7 %	Internal Method
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress (300% Strain)	300 psi	2.07 MPa	ASTM D412
Tensile Strength (Yield)	600 psi	4.14 MPa	ASTM D412
Tensile Elongation (Break)	700 %	700 %	ASTM D412
Tear Strength	100 lbf/in	17.5 kN/m	ASTM D624
Compression Set			
73°F (23°C), 22 hr	15 %	15 %	ASTM D395B
158°F (70°C), 22 hr	38 %	38 %	ASTM D395
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore A)	39 to 49	39 to 49	Internal Method
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Brittleness Temperature	-63.0 °F	-52.8 °C	ASTM D746
Aging	Typical Value (English)	Typical Value (SI)	Test Method
Change in Tensile Strength in Air			ASTM D573
302°F (150°C), 158 hr	35 %	35 %	
Change in Ultimate Elongation in Air			ASTM D573
302°F (150°C), 158 hr	25 %	25 %	
Change in Durometer Hardness in Air			ASTM D573
Shore A, 302°F (150°C), 158 hr	2.0	2.0	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Burning Rate (50.0 mil (1.27 mm))	2 in/min	51 mm/min	FMVSS 302

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Additional Information	Typical Value (English)	Typical Value (SI)	Test Method
Ozone Resistance ² (100°F (38°C))	No Cracking	No Cracking	ASTM D518/1149
Temperature - Long Term Upper Service	> 257 °F	> 125 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Rear Temperature	380 to 400 °F	193 to 204 °C
Front Temperature	400 to 420 °F	204 to 216 °C
Nozzle Temperature	420 to 450 °F	216 to 232 °C
Mold Temperature	80.0 to 150 °F	26.7 to 65.6 °C
Injection Pressure	500 to 700 psi	3.45 to 4.83 MPa
Injection Rate	Moderate-Fast	Moderate-Fast
Back Pressure	100 to 200 psi	0.689 to 1.38 MPa

Notes

¹ Typical properties: these are not to be construed as specifications.

² 100 pphm, 72 hrs, 7X magnification