KRATON® G7705 GI-B

Wednesday, July 20, 2016

Kraton Polymers LLC - Styrene Ethylene Butylene Styrene Block Copolymer

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