



Monprene® S0 CP-14055 XRD1 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene S0 CP-14055 XRD1 is an ABS bondable thermoplastic elastomer (TPE) containing up to 10% sustainable content. Monprene S0 CP-14055 XRD1 is a low density, low hardness grade suitable for injection molding.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose • Good Flexibility	• Low Density • Low Hardness	• Low Specific Gravity
Uses	• Appliances • Consumer Applications • Flexible Grips • Handles • Household Goods	• Knobs • Rubber Replacement • Safety Equipment • Soft Touch Applications • Sporting Goods	• Stationary Supplies • Toys • Water Sports Equipment
RoHS Compliance	• RoHS Compliant		
Appearance	• Grey	• Natural Color	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.932		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	15	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ² (100% Strain)	247	psi	ASTM D412
Tensile Stress ³ (300% Strain)	363	psi	ASTM D412
Tensile Strength ³ (Break)	696	psi	ASTM D412
Tensile Elongation ³ (Break)	730	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	55		
Shore A, 5 sec, Injection Molded	50		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	320 to 350	°F
Middle Temperature	356 to 383	°F
Front Temperature	356 to 383	°F

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Injection	Nominal Value	Unit
Nozzle Temperature	356 to 383	°F
Processing (Melt) Temp	356 to 383	°F
Mold Temperature	80 to 120	°F
Injection Rate	Moderate-Fast	
Back Pressure	25.0 to 100	psi
Screw Speed	50 to 100	rpm
Cushion	0.150 to 0.500	in

Injection Notes

Drying is recommended to dry the pellets for 2 to 3 hours at 85°C (150°F). Injection molding temperature recommended to be kept at below 195°C with proper venting to remove odor during molding process.

Notes

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

² 20 in/min

³ Die C, 20 in/min