



Elexar® EL-3954-45 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Elexar EL-3954-45 is a general purpose thermoplastic elastomer designed for electrical applications requiring flexibility over a wide temperature range. Elexar EL-3954-45 is a low hardness, high density, RoHS compliant grade suitable for injection molding.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Electrically Insulating • Filled • General Purpose • Good Colorability • Good Electrical Properties	• Good Flexibility • Good Moldability • Good Processability • Halogen Free • High Density	• High Specific Gravity • Low Hardness • Lubricated • Medium Flow • Slip
Uses	• Connectors • Electrical/Electronic Applications • Gaskets	• General Purpose • Grommets • Industrial Applications	• Wire & Cable Applications
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.17		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	15	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength (Break)	1400	psi	ASTM D412
Tensile Elongation (Break)	650	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	46		ASTM D2240

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	390 to 420	°F
Middle Temperature	415 to 430	°F
Front Temperature	430 to 440	°F
Nozzle Temperature	430 to 445	°F
Processing (Melt) Temp	430 to 445	°F
Mold Temperature	77 to 150	°F
Injection Pressure	200 to 1000	psi

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Injection	Nominal Value	Unit
Injection Rate	Moderate-Fast	
Back Pressure	25.0 to 50.0	psi
Screw Speed	50 to 100	rpm
Cushion	0.150 to 1.00	in

Injection Notes

Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 150°F (65°C).

Notes

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