



Telcar® TL-8730A

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Telcar TL-8730A is a high performance flame retardant thermoplastic elastomer designed for electrical applications requiring flexibility over a wide temperature range. Telcar TL-8730A is a high density, higher hardness, UL 94 V-0 grade with good UV stability and is suitable for both injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Brominated • Filled • Flame Retardant • Good Colorability • Good Electrical Properties	• Halogenated • Heat Aging Resistant • High Density • High Elongation • High Hardness	• High Tensile Strength • Low Temperature Flexibility • Medium Flow • Sunlight Resistant (720 hours) • UV Resistant
Uses	• Appliance Wire Insulation • Appliance Wire Jacketing • Cable Jacketing • Connectors • Flame Retardant Insulation	• Flame Retardant Jacketing • Flexible Cord Jacketing • Industrial Cable Insulation • Industrial Cable Jacketing • Terminal Cable Jacketing	• Underground Power Cable • Wire & Cable Applications • Wire Jacketing
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.25		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)	1800	psi	ASTM D412
Tensile Elongation (Break)	600	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	86		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	-67.0	°F	ASTM D746
Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air (316°F, 168 hr)	-2.0	%	ASTM D573
Change in Ultimate Elongation in Air (316°F, 168 hr)	-13	%	ASTM D573
Change in Tensile Strength 140°F, 168 hr, in IRM 902 Oil	-7.0	%	ASTM D471
Change in Ultimate Elongation 140°F, 168 hr, in IRM 902 Oil	-3.0	%	ASTM D471
Electrical	Nominal Value	Unit	Test Method
Dielectric Strength	1000	V/mil	ASTM D149
Dielectric Constant (1 kHz)	2.40		ASTM D150
Dissipation Factor (77°F, 1 MHz)	4.0E-3		ASTM D150
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in, NT)	V-0		UL 94
Oxygen Index	28	%	ASTM D2863

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	340 to 380	°F
Middle Temperature	350 to 390	°F
Front Temperature	360 to 400	°F
Nozzle Temperature	370 to 410	°F
Processing (Melt) Temp	370 to 410	°F
Mold Temperature	77 to 150	°F
Injection Pressure	200 to 1000	psi
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
Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	330 to 370	°F
Cylinder Zone 2 Temp.	340 to 380	°F
Cylinder Zone 3 Temp.	350 to 390	°F
Cylinder Zone 4 Temp.	350 to 390	°F
Cylinder Zone 5 Temp.	360 to 400	°F
Die Temperature	374 to 410	°F

Extrusion Notes

Screw Speed: 30 to 100 rpm

Notes

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