Telcar® TL-8730A

Thermoplastic Elastomer

Teknor Apex Company

Message:

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 Information	
Features	Flexibility at low temperatures
	High tensile strength
	High density
	Good UV resistance
	Good electrical performance
	Good heat aging resistance
	Good coloring
	Medium liquidity
	Halogenated
	Sunlight resistance, 720 hours
	Fill
	brominated
	Extended tensile rate
	High hardness
	Flame retardancy
Uses	Flame Retardant Insulation
	Flame Retardant Jacketing
	Industrial Cable Jacketing
	Underground cable
	Cable sheath
	Electrical wire sheath material
	Electrical conductor insulation material
	Wire and cable applications
	Wire sheath
	Industrial cable insulation material
	Connector
	cord sheath
	Terminal cable sheath material
RoHS Compliance	RoHS compliance
Appearance	Natural color

Forms	Particle
Processing Method	Extrusion Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.25	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	15	g/10 min	ASTM D1238
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore A)	86		ASTM D2240
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	12.4	MPa	ASTM D412
Tensile Elongation (Break)	600	%	ASTM D412
Aging	**Nominal Value**	**Unit**	**Test Method**
Change in Tensile Strength in Air (158°C, 168 hr)	-2.0	%	ASTM D573
Change in Ultimate Elongation in Air (158°C, 168 hr)	-13	%	ASTM D573
Change in Tensile Strength (60°C, 168 hr, in IRM 902 Oil)	-7.0	%	ASTM D471
Change in Ultimate Elongation (60°C, 168 hr, in IRM 902 Oil)	-3.0	%	ASTM D471
Thermal	**Nominal Value**	**Unit**	**Test Method**
Brittleness Temperature	-55.0	°C	ASTM D746
Electrical	**Nominal Value**	**Unit**	**Test Method**
Dielectric Strength	39	kV/mm	ASTM D149
Dielectric Constant (1 kHz)	2.40		ASTM D150
Dissipation Factor (25°C, 1 MHz)	4.0E-3		ASTM D150
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.5 mm, NT)	V-0		UL 94
Oxygen Index	28	%	ASTM D2863

Legal statement

Injection	Nominal Value	Unit
Rear Temperature	171 - 193	°C
Middle Temperature	177 - 199	°C
Front Temperature	182 - 204	°C
Nozzle Temperature	188 - 210	°C
Processing (Melt) Temp	188 - 210	°C
Mold Temperature	25 - 66	°C

Injection Pressure	1.38 - 6.89	MPa
Injection Rate	Moderate-Fast	
Back Pressure	0.172 - 0.345	MPa
Screw Speed	50 - 100	rpm
Cushion	3.81 - 25.4	mm
Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	166 - 188	°C
Cylinder Zone 2 Temp.	171 - 193	°C
Cylinder Zone 3 Temp.	177 - 199	°C
Cylinder Zone 4 Temp.	177 - 199	°C
Cylinder Zone 5 Temp.	182 - 204	°C
Die Temperature	190 - 210	°C

Extrusion instructions

Screw Speed: 30 to 100 rpm

Recommended distributors for this material

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