Telcar® TL-8421

Thermoplastic Elastomer

Teknor Apex Company

Message:

Telcar®TL-8421 is a thermoplastic elastomer (TPE) material. This product is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific. The processing method is extrusion or injection molding.
Telcar®The main features of the TL-8421 are:
flame retardant/rated flame
ROHS certification
Typical application areas include:
Wire and cable
Electrical/electronic applications

General Information		
UL YellowCard	E54709-245358	E142591-100745022
Uses	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	
Wire Types	SJEOW	
Agency Ratings	UL 1581 .QMTT2.E73402 3	
RoHS Compliance	RoHS compliance	
UL File Number	QMTT2.E73402	
Appearance	Opacity	
Forms	Particle	
Processing Method	Extrusion	
	Injection molding	

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.978	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	18	g/10 min	ASTM D1238
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore A)	91		ASTM D2240
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress			ASTM D412

100% strain	6.89	MPa	ASTM D412
300% strain	9.07	MPa	ASTM D412
Tensile Strength (Break)	19.7	MPa	ASTM D412
Tensile Elongation (Break)	620	%	ASTM D412
Aging	**Nominal Value**	**Unit**	**Test Method**
Change in Tensile Strength in Air (158°C, 168 hr)	0.0	%	ASTM D573
Change in Ultimate Elongation in Air (158°C, 168 hr)	-9.0	%	ASTM D573
Change in Tensile Strength			ASTM D471
60°C, 168 hr, in IRM 902 oil	10	%	ASTM D471
121°C, 18 hr, in animal fat	-30	%	ASTM D471
121°C, 18 hr, in vegetable oil	-40	%	ASTM D471
Change in Ultimate Elongation			ASTM D471
60°C, 168 hr, in IRM 902 oil	6.0	%	ASTM D471
121°C, 18 hr, in animal fat	-25	%	ASTM D471
121°C, 18 hr, in vegetable oil	-30	%	ASTM D471
Change in Volume			ASTM D471
121°C, 18 hr, in animal fat	1.0	%	ASTM D471
121°C, 18 hr, in vegetable oil	1.0	%	ASTM D471
Thermal	**Nominal Value**	**Unit**	**Test Method**
Brittleness Temperature	< -60.0	°C	ASTM D746
RTI Elec	90.0	°C	UL 746
RTI	90.0	°C	UL 746
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity (50°C)	3.5E+16	ohms·cm	ASTM D257
Dielectric Strength	38	kV/mm	ASTM D149
Dielectric Constant (1 kHz)	2.40		ASTM D150
Insulation Resistance	9.0E+10	ohms	IEC 60167
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.810 mm, Natural Color)	HB		UL 94
Oxygen Index	18	%	ASTM D2863
Injection	**Nominal Value**	**Unit**	
Rear Temperature	199 - 216	°C	
Middle Temperature	213 - 221	°C	
Front Temperature	221 - 227	°C	
Nozzle Temperature	221 - 229	°C	
Processing (Melt) Temp	221 - 229	°C	
Mold Temperature	25.0 - 65.6	°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

Injection instructions
无需干燥.但如果湿度过大,则将粒料在150°F (65°C)的温度下干燥2-4小时.

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	193 - 210	°C
Cylinder Zone 2 Temp.	199 - 216	°C
Cylinder Zone 3 Temp.	213 - 221	°C
Cylinder Zone 5 Temp.	221 - 227	°C
Die Temperature	221 - 229	°C

Extrusion instructions
螺杆转速30 - 100 rpm

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China