Telcar® TL-3050-88 RED 4179

Thermoplastic Elastomer

Teknor Apex Company

Message:

Telcar TL-3050-88 RED is a general purpose thermoplastic elastomer designed for electrical applications requiring flexibility over a wide termperture range. Telcar TL-3050-88 RED is a high durometer, high tensile strength grade that is RoHS compliant. This grade is UL listed and is suitable for both injection molding and extrusion.

General Information	
Features	High elasticity
	High tensile strength
	Good melt strength
	Good flexibility
	Good coloring
	Low liquidity
	General
	Halogen-free
	Extended tensile rate
	High hardness
Uses	Electrical components
	Wire and cable applications
	Washer
	Insulating material
	Connector
	Moisture-resistant insulating material
	Weather-resistant sealing strip
	Fatigue elimination supplies
	General
Agency Ratings	UL 1581 2
RoHS Compliance	RoHS compliance
UL File Number	QMTT2.E73402
Appearance	Red
Forms	Particle
Processing Method	Extrusion
	Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.898	g/cm³	ASTM D792

Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	2.0	g/10 min	ASTM D1238
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240
Shaw A, 1 sec	91		ASTM D2240
Shaw A, 15 seconds	88		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Flexural Modulus	280	MPa	ASTM D790
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [1]			ASTM D412
100% strain, 0.508mm [2]	6.21	MPa	ASTM D412
300% strain, 0.508mm [3]	7.79	MPa	ASTM D412
Tensile Strength (fracture, 0.508mm)	20.5	MPa	ASTM D412
Tensile Elongation (fracture, 0.508mm)	700	%	ASTM D412
Aging	**Nominal Value**	**Unit**	**Test Method**
Change in Tensile Strength in Air (136°C, 168 hr)	28	%	ASTM D573
Change in Ultimate Elongation in Air (136°C, 168 hr)	-7.0	%	ASTM D573
Change in Tensile Strength (60°C, 168 hr, in IRM 902 Oil)	-84	%	ASTM D471
Change in Ultimate Elongation (60°C, 168 hr, in IRM 902 Oil)	-75	%	ASTM D471
Thermal	**Nominal Value**	**Unit**	**Test Method**
Brittleness Temperature	-60.0	°C	ASTM D746
RTI Elec	50.0	°C	UL 746
RTI	50.0	°C	UL 746
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity			ASTM D257
23°C	> 1.0E+15	ohms·cm	ASTM D257
50°C	> 1.0E+14	ohms·cm	ASTM D257
Dielectric Strength	45	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
1 kHz	2.10		ASTM D150
1 MHz	2.10		ASTM D150
Dissipation Factor			ASTM D150
1 kHz	8.0E-4		ASTM D150
1 MHz	2.8E-3		ASTM D150
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.50 mm, ALL)	HB		UL 94
Oxygen Index	17	%	ASTM D2863
Legal statement			

The information and recommendations contained in this bulletin are, to the best of our knowledge, accurate and reliable but no guarantee of their accuracy is made. All products are sold upon condition that purchasers shall make their own tests to determine the suitability of such products for their particular purposes and uses and purchaser assumes all risks and liability for the results of use of the products, including use in accordance with seller's recommendations. Nothing in this bulletin constitutes permission or a recommendation to practice or use any invention covered by any patent owned by this company or others. There is no warranty of merchantability and there are no other warranties for the products described. For detailed Product Stewardship information, please contact us. Any product of Teknor Apex, including product names, shall not be used or tested in medical or food contact applications without the prior written acknowledgement of Teknor Apex as to the intended use. Please note that some products may not be available in one or more countries.

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	25.0 - 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
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 5 Temp.	182 - 204	°C
Die Temperature	190 - 210	°C
Extrusion instructions		
螺杆转速30 - 100 rpm		
NOTE		
1.	die cut from extruded tapes	
2.	Mouth die C, 510mm/min	
3.	C mold, 510mm/min	

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


WECHAT