Telcar® TL-8712R

Teknor Apex Company - Thermoplastic Elastomer

Tuesday, April 7, 2026

General Information

Product Description

Telcar TL-8712R is a flame retardant thermoplastic elastomer designed for electrical applications requiring flexibility over a wide temperature range. Telcar TL-8712R is a medium hardness, medium durometer grade that is RoHS compliant. This grade 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	• Flame Retardant • General Purpose • Good Colorability • Good Flexibility	• Halogenated • Heat Aging Resistant • High Elasticity • High Elongation	• High Specific Gravity • High Tensile Strength • Low Flow • Medium Hardness
Uses	• Appliance Wire Insulation • Appliance Wire Jacketing • Cable Jacketing • Connectors	• Flexible Cord Jacketing • Industrial Cable Insulation • Terminal Cable Jacketing • Underground Power Cable	• Wire & Cable Applications • Wire Jacketing
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.08		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	3.5	g/10 min	ASTM D1238
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [2, 3] (100% Strain, 0.0200 in)	360	psi	ASTM D412
Tensile Stress [2, 3] (300% Strain, 0.0200 in)	530	psi	ASTM D412
Tensile Strength [2, 3] (Break, 0.0200 in)	2000	psi	ASTM D412
Tensile Elongation [2, 3] (Break, 0.0200 in)	680	%	ASTM D412
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore A)	71		ASTM D2240
Thermal	**Nominal Value**	**Unit**	**Test Method**
Continuous Use Temperature	221	°F	ASTM D794
Brittleness Temperature	< -76.0	°F	ASTM D746
Aging	**Nominal Value**	**Unit**	**Test Method**
Change in Tensile Strength in Air (277°F, 168 hr)	9.0	%	ASTM D573
Change in Ultimate Elongation in Air (277°F, 168 hr)	-1.0	%	ASTM D573
Change in Tensile Strength			ASTM D471
140°F, 168 hr, in IRM 902 Oil	-8.0	%	
Change in Ultimate Elongation			ASTM D471
140°F, 168 hr, in IRM 902 Oil	3.0	%	

Revision Date: 8/23/2019

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 purchasers assume 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 by others. There is no warranty of merchantability and there are no other warranties for the products described.

Copyright © 2026 UL Prospector

Telcar® TL-8712R

Teknor Apex Company - Thermoplastic Elastomer

Electrical	Nominal Value	Unit	Test Method
Volume Resistivity (122°F)	6.6E+15	ohms·cm	ASTM D257
Dielectric Strength	660	V/mil	ASTM D149
Dielectric Constant			ASTM D150
1 kHz	2.10		
1 MHz	2.10		

Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.12 in, All Colors)	V-2		UL 94
Oxygen Index	20	%	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.

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.	370 to 405	°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.

[2] Die C, 20 in/min

[3] die cut from extruded tapes

Revision Date: 8/23/2019

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 purchasers assume 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 by others. There is no warranty of merchantability and there are no other warranties for the products described.

Copyright © 2026 UL Prospector

Telcar® TL-8712R

Teknor Apex Company - Thermoplastic Elastomer

Teknor Apex Company
Corporate Headquarters

In U.S. for Vinyls, TPEs, Colorants,

Engineered Thermoplastics (Chem Polymer)
505 Central Avenue
Pawtucket, Rhode Island 02861 U.S.

Phone: 401-725-8000
Fax: 401-725-8095
Toll Free (U.S. only) 800-556-3864

www.teknorapex.com
info@teknorapex.com

Teknor Apex B.V.

Brightlands Chemelot Campus Umonderbaan 22
6167 RD Geleen, Netherlands

Phone: +31 46 7020 950
Fax: +31 46 7020 990

www.teknorapex.com
tpe@teknorapex.com

Teknor Apex (Suzhou) Advanced Polymer Compounds Co. Pte. Ltd.

No. 78 Ping Sheng Road

Suzhou Industrial Park
Jiangsu, China 215126

Phone: (86) 512-6287-1550
Fax: (86) 512-6288-8371

www.teknorapex.com
infotaap@teknoapex.com

Teknor Apex Asia Pacific PTE. LTD.

41 Shipyard Road

Singapore 628134

Phone: (65) 6265-2544
Fax: (65) 6265-1821

www.teknorapex.com
infotaap@teknorapex.com

Revision Date: 8/23/2019

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 purchasers assume 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 by others. There is no warranty of merchantability and there are no other warranties for the products described.

Copyright © 2026 UL Prospector