

Technical Data Sheet

FUTUREWAY® TIX-30

Fireproof Insulation Sheet

FUTUREWAY[®] TIX-30 is an ultra-high strength fireproof insulation material composed of special fire-resistant organic silicon and fire-resistant fabric. TIX-30 has strong fire resistance and can resist flame ablation up to 1300°C, avoiding the spread of flames to other areas. At the same time, TIX-30 can maintain structural integrity in high temperatures or flames, and has excellent electrical insulation. In addition, TIX-30 has excellent flexibility and is convenient for processing and installation. These unique features enable materials to address a range of safety and design issues in electric vehicles.



Features & Benefits	High mechanical strength			
	• Excellent fire resistance			
	• Excellent electrical insulation at high temperatures			
	• Ultra-thin thickness and excellent flexibility			
Typical Applications	• Electrical insulation sheet at high temperatures for module bar			
	• Electrical insulation sheet at high temperatures for box girder			
	• Electrical insulation sheet at high temperatures for cell side			
	• Electrical insulation sheet at high temperatures for module side panel			
	• Electrical insulation sheet at high temperatures for module output pole			
	• Electrical insulation sheet at high temperatures for copper bar/aluminum bar			
Services	• Available with a pressure sensitive-adhesive on one or two sides			
	• Provide cutting, splicing and other processing services			
Use	For PSA options, surfaces must be clean and free of oil, grease, moisture, dust and			
	dirt. Isopropyl alcohol is good for cleaning the surface.			

Statement: The information contained in this data sheet is intended to assist you in the design of Futureway materials. It is not intended to and does not create any explicit or implicit guaranties, including any guaranty of marketability of the goods and for special purposes. It is also not guaranteed that users can achieve the results shown in the technical specifications of this material in specific applications. They will change with different application situations, such as equipment type, environmental conditions, process conditions, etc. Users should determine the suitability of Futureway materials for each application.



Typical Properties

Property	Unit	Test Method	Typical Value	
Physical				
Color	-	Visual	Gray	Gray
Thickness	mm	ASTM D374	0.2	0.3
Density	g/cm ³	ASTM D1056	1.60	1.57
Tensile Strength	MPa	ASTM D412	106	94
Tear Strength	kN/m	ASTM D624 (DIE C)	256	215
Flammability				
Flame Resistance	-	UL94	VTM-0/V-0	VTM-0/V-0
Electrical & Thermal				
Dielectric Strength	kV/mm	ASTM D149	35	33
Volume Resistivity	Ohm∙cm	ASTM D257	10.3×10 ¹⁵	10.6×10 ¹⁵
Electrical Resistance At Elevated Temperature (800°C @ 10min)	Ohm	IEC 60345	2.6×10 ⁷	1.2×10 ⁷
Fire Resistance (1300°C @ 10 min)	-	-	Pass	Pass
Thermal Conductivity	W/(m·K)	ASTM C518	0.13	0.13
Temperature Range	°C	SAE J2236	-55 to +200	-55 to +200

Notes:

*Typical value is based on historical data. Please note the frequency of testing varies.

**Additional industry specifications are also available. All other properties are based on industry standard guidelines.

Usable Life & Storage	10 years after the date of manufacture when stored in original packaging at		
	temperatures up to 35°C and 70% relative humidity(see applicable data sheets for		
	pressure-sensitive adhesive option).		
Packaging Information	Continuous length wide coil material. Length varies with thickness.		
	Special thickness and roll sizes also available.		

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