

Technical Data Sheet

## **FUTUREWAY® TIX-10**

## **Silicone High Temperature Insulation Tape**

FUTUREWAY<sup>®</sup> TIX-10 is an ultra-high-strength silicone rubber material compounded with special fire-resistant silicone rubber and fire-resistant fabric, designed to protect sensitive parts or structures in fire. The soft silicone rubber has a unique fire resistance, which can resist flame ablation up to 1000°C, while reducing the spread of flame to other areas. These unique functions enable the material to solve the safety and design problems of electric vehicles, rail trains, and industrial manufacturing.



Features & Benefits	<ul> <li>Because the fire-resistant silicone rubber is covered with a layer of ultra-high-strength fire-resistant fabric, it has high mechanical strength</li> <li>Maintain the integrity of the structure at high temperature or fire ,so that it has excellent electrical insulation</li> <li>Low smoke, low flame and low smoke toxicity during combustion</li> <li>It can be processed into ultra-thin thickness and has excellent flexibility</li> </ul>
Typical Applications	<ul> <li>Fireproof insulation pads for side panels and end panels of EV battery pack modules; fireproof insulation film for battery pack circuits; fireproof PACK cover panels</li> <li>Cargo covers for aerospace</li> <li>Protective covering for railcar brake lines</li> <li>Fire barriers and smoke seals between railcar passenger compartments</li> </ul>
Services	<ul> <li>Available with a pressure sensitive-adhesive on one or two sides</li> <li>Provide cutting, splicing and other processing services</li> </ul>
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	<b>Test Method</b>	<b>Typical Value</b>
Physical			
Color	-	Visual	White/Black/Orange
Thickness	mm	ASTM D374	0.2/0.3 (Standard) 0.5/0.8/1.0/1.5 (Customized)
Hardness	Shore A	ASTM D2240	75
Density	g/cm <sup>3</sup>	ASTM D1056	1.4
Tensile Strength	MPa	ASTM D412	35
Tear Strength	kN/m	ASTM D624	27
Flammability			
Flame Resistance	-	UL94	VTM-0 or V-0
Electrical & Thermal			
Dielectric Strength	kV/mm	ASTM D149	27
Volume Resistivity	Ohm∙cm	ASTM D257	5.3×10 <sup>14</sup>
Electrical Resistance At Elevated Temperature (1000°C)	Ohm	IEC 60345	$0.8 \times 10^{6}$
Temperature Range	°C	SAE J2236	-55~+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 InformationMaster roll size: 914 mm or 1200 mm width. Length varies with thickness.Special thickness and roll sizes also available.

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