

Specifications, Performance & Properties

Electrical & Mechanical Specifications

Typical Properties	Test Method	Performance	
Operating Temperature Ranges:			
Continuous: Intermittent:	Standard Silicone Property	-45°C to 200°C (-50°F to 400°F) -65°C to 260°C (-80°F to 500°F)	
Specific Gravity	ASTM-D792-13	1.15 - 1.21	
Hardness, Durometer, Shore A	ASTM D2240-05 (2010)		
Room-cured – 24 Hours:		55 ± 5	
Tensile Strength	ASTM D3729-05 (2011)	700 psi min.	
Elongation	ASTM D3729-05 (2011)	300% min	
Tear Strength	ASTM D624-00 (2012)	60ppi min.	
Bond Strength	ASTM D2148-13	2 lbs. min. (Standard 1" tape)	
Adhesion, unwind	ASTM D2148-13	3 in. min.	
Cold Brittle Point	ASTM D2137-11	-53°C (-63°F)	
Water Absorption, by weight	Fed. Std. 601, Method 6251	3% max.	
Dielectric Strength	ASTM D149-09	400Vpm min.	
Volume Resistivity	ASTM D257	1 x 10 ¹³ OHMS/cm min.	

Relation and Compliance to Industry Standards

- REACH: Registration, Evaluation, Authorization and Restriction of Chemicals (EU Regulation)
- CPSIA: Consumer Product Safety Improvement Act
- PROP 65: The Safe Drinking Water and Toxic Enforcement Act of 1986
- RoHS: Restriction of Hazardous Substances Directive 2022/95/EC
- We have the ability to meet A-A-59163A: Which supersedes MIL-I-46852C

The Ultimate Insulating Wrap Product Line is UL Listed for use at not more than 600 V and at not more than 80°C (176°F).

General Performance Properties

Moisture Resistance	•	Excellent	UV Resistance	•	Excellent
Electrical Insulation	•	Excellent	Ozone Resistance	•	Excellent
Resilience	•	Excellent	Corrosion Prevention	•	Excellent
High Temperatures	•	Excellent	Solvent Resistance	•	Good
Flame Resistance	•	Good	Acid Resistance	•	Good-Fair
Abrasion Resistance	•	Good	Oil Resistance	•	Good-Fair
Tear Resistance	•	Good	Hydrocarbon Resistance	•	Good-Fair
Class II Insulator National Floatinal Manufacturers Association (NENAA)					

Class H Insulator - National Electrical Manufacturers Association (NEMA)

Minimum bond strength: 2" wide tape = 4lb., 1.5" tape = 3lb., 1" = 2lb., .750" = 1.5lb., .500" = 1lb.

X-Treme Tape has a 5 year shelf life (from date of manufacture) when stored at room temperature. Prolonged exposure to excessive temperatures can lessen the application bond of the tape.

Warranty: X-Treme Tape is warranted against defects in material and workmanship when used for the purposes intended, under normal conditions. The warranty applies to product only and does not apply to damages arising from use of the warranted product. The above values are typical performance data of silicone rubber tape and are not intended to be used as design data.



