

Self-Fusing Silicone Tapes

ARLON® and MOX-Tape® silicone tapes are produced from specially formulated silicone rubber. They bond irreversibly to provide an insulative barrier that is resistant to moisture, oxygen, ozone, and corona over a wide temperature range -54°C up to +204°C (-65°F up to +400°F). These products provide superior electrical insulation with a dielectric strength of 300 VPM minimum at 180°C (356°F).

Applications:

Mechanical

- Wire Harness and Bundling Wrap
- Emergency Pipe and Hose Repair
- Pipe Identification
- Air Duct Sealing
- Coolant Line Repairs
- Traction and Protection for Rollers

Electrical

- Insulation for Splicing and Terminating Wire and Cable
- Coil Insulation in Motors
- Insulating and Sealing of Electrical Connections
- Motor Connection Wrapping
- Cable Management
- Weatherproofing

Extreme Environments

- Space and Aviation
- Heated Transfer Lines
- Radioactive Environments
- Riggings and Power Systems in Marine
- Underwater

Properties	
Temperature Range	-54°C to +204°C (-65°F to +400°F)
Volume Resistivity	10 ¹³ ohm-cm min. (ASTM D257)
Self Adhesion	2 p.p.i min. (3.5 N/cm) (ASTM D2240)
Hardness	50± 10 Shore A (ASTM D2240)
Moisture Absorption	0.9% - 46 hrs. in H ₂ O @ 21°C (70°F)
Performance Advantages	
No Adhesive: Chemically bonds to itself at room temperature within 24 hours	
Remains non-tacky to the touch and does not adhere to other substrates or surfaces	
Removes cleanly and easily	
Insulates with a single wrap reducing labor time and cost	
Resists moisture, oxygen and ozone to ensure continuous high insulation values	
Available in flame retardant options with UL-V0 rated compound	
Resists heat, mechanical shock, corona and dampens vibration	
Conforms smoothly when wrapped around complex forms	
All tapes are protected by a special interleaved liner	

Note: The above properties are published as a guide only and should not be used for specification development without testing in your own laboratory.

ARLON and MOX-Tape self-fusing silicone tapes have a 12 month shelf life from the date of manufacture when stored at 21°C +/-3°C (70°F +/- 5°F) unless stated otherwise in product specific literature, labels, or certificates of conformance.

Self-Fusing Silicone Tapes

ARLON and Mox Tape Rectangular Tape

Rectangular tape is of uniform thickness and is ideal for applications where a smooth, even layer of tape is not required.



Tape Cross Section



Bonded Cross Section

ARLON and MOX Tape Fiberglass Reinforced Tape

These self-fusing silicone tapes incorporate a sinusoidal fiberglass fabric that gives a controlled elongation and increased tear resistance. 15% and 25% controlled elongation fabrics are available.



Tape Cross Section

Sinusoidal Fabric, Controlled Stretch

15 or 25% Elongation



ARLON and Mox-Tape Triangular Tape

The triangular tapes have a tapered edge and a colored guide line along the apex which makes wrapping with a 50% overlap simple and repeatable. These tapes are ideal for applications requiring a smooth, even layer of tape.



Tape Cross Section



Bonded Cross Section

Product Nomenclature

A 2 0 2 0 - R 0 0 4 - 1 2

Roll Length (in Linear Yards)
12 12 Linear Yards (example)

Width (in .025" increments)
004 1.0" (4 x 0.25")

Color*
R Red
B Black
W White
X Gray *other colors available

Thickness
20 0.020" thick (example)

Construction Type
10 Unsupported, Rectangular Profile
20 Unsupported, Triangular Profile
30 25% controlled elongation fiberglass support, Rectangular Profile
40 15% controlled elongation fiberglass support, Rectangular Profile

Silicone Tape Brand
A ARLON
T MOX-Tape

Certifications

Products can also be certified to many of the following specifications upon request.

- MIL-I-46852C, Type 1 & Type 2
- A-A-59163A, Type 1 & Type 2
- MIL-I-22444C
- Boeing DMS2186 Type 1 & Type 2
- Lockheed Martin MMS J517
- Lockheed Martin 5-00857
- General Electric A50A493
- General Electric A50E112
- General Dynamics P5384
- Rohr RMS315; Type 1, Type 2 & Type 3
- FAR 25.853
- UL V-0