

# 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 <sup>13</sup> 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 <sub>2</sub> 0 @ 21°C (70°F)
Performance Advantages	

#### 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

15 or 25% Elongation



### **ARLON and Mox-Tape Triangular Tape**

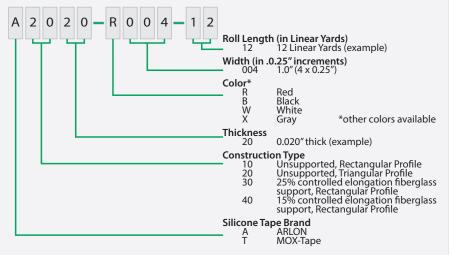
The triangular tapes have a tapered edge and a colored guide line along the apex which makes wrapping with a 50% overlap simple and repeatable. These tapes are ideal for applications requiring a smooth, even layer of tape.





**Tape Cross Section** 

**Product Nomenclature** 



### 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

