

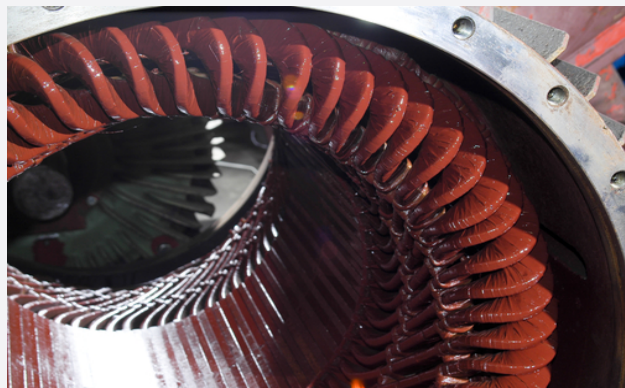
ARLON[®] Silicone Coil Insulation Materials

for Motor and Generator Coils in Rail Transportation

Coil insulation materials are a critical part of motor coils, electric motors, and generators.

Silicone is the material of choice over epoxy systems due to its high thermal stability across a wide temperature range and excellent insulative properties. Silicone also provides protection from chemicals, moisture, and vibrational fatigue.

Rogers' decades of material expertise working with the unique chemical backbone of silicone is the foundation for the ARLON[®] product portfolio. This expertise enables ARLON coil insulation materials to meet the tough service requirements for motor coil in rail transportation and other large rotating machinery.



Comprised of a variety of uncured and semi-cured silicones, ARLON[®] coil insulation materials are an ideal solution for the demands of rail/locomotive motor and generator coil applications, providing superior electrical insulation and environmental protection as well as excellent dielectric strength, high thermal stability, flexibility, and durability.

ARLON coil insulation materials are available in range of constructions, colors, sizes, roll lengths, and widths and can be customized to a customer's exact specifications.

ADVANTAGES



Superior Electrical Insulation

High dielectric strength provides superior electrical insulation, even in the most challenging operating conditions



Extreme Temperature Stability

Withstands an extreme range of temperatures from -57 to 220°C without losing insulation performance



Unparalleled Quality

Compliant to EMS 558, EMS 2074, and various EMD, GE, GM, NEC, and BHEL specifications



Durability

Complete environmental protection - resistant to moisture, UV, ozone, chemicals, corona, arc-tracking, and vibrational fatigue



Flexibility

Can be used in a variety of coil shapes, sizes, and complex geometries



Safety

Naturally flame resistant

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Capabilities Overview

As the world leader of high-quality, customizable silicone solutions, Rogers Corporation offers a full range of innovative manufacturing technologies paired with unparalleled engineering expertise.

This enables the quick customization of material solutions to meet specific application needs.

Materials and Specifications

Rogers offers a full range of ARLON® primary field coil insulation materials designed and certifiable to various OEM specifications at Caterpillar EMD®, General Motors (GM), General Electric (GE), National Electric Coil (NEC), and BHEL.

Additionally, ARLON self-fusing tapes can be used in various electrical connector junction applications.

The table below showcases some of the standard ARLON materials and tapes available. All materials can be customized to meet exact specification requirements.

Products	Rubber Compound	Glass Style	Total Thickness mil (mm)	Construction	Specifications
P29514R014	P2951: 47 duro semi cured	Style 7727	14 (0.36)	Semi-cured rubber on one side of fiberglass	EMS518, various EMD, GE, and BHEL parts
P29514R015	P2951: 47 duro semi cured		15 (0.38)		
P29514R020	P2951: 47 duro semi cured		20 (0.51)		
P29514R025	P2951: 47 duro semi cured		25 (0.64)		
51044R020	04: 40 duro semi cured	Style 7628	20 (0.51)	Uncured atop cured, and cured rubber on both sides	EMS518, various EMD parts
51044R015	04: 40 duro semi cured		15 (0.38)		NEC
51228R015	22: 50 duro uncured		15 (0.38)		GE
44250R011	25: 60 duro uncured	Style 1165	11 (0.28)	Uncured rubber on one side of fiberglass	FTMS 191A-5903
P3272-10R12-P4	P3272: High strength self-fusing cured	N/A	30 (0.76)	Self-fusing cured rubber only, no fiberglass	EMS2074, various EMD parts
T3020-R004-12	MOX-Tape® self-fusing cured rubber	25% elongation sinusoidal fiberglass	20 (0.51)	Self-fusing cured rubber on both sides of fiberglass	EMS2074, various EMD and GE parts

Visit the ARLON® Product Properties Guide for the full ARLON material portfolio: <https://tools.rogerscorp.com/ems/aron/properties/index.aspx>

To request a free material sample, please contact the Rogers Solutions Center at solutions@rogerscorp.com