

# Thermo-Lag® 270



**A water-based, fire-resistant, and fire retardant coating applied directly to electrical cables to maintain circuit integrity and retard flame propagation.**

**PRODUCT DETAILS** Thermo-Lag 270 was designed to provide protection for electrical cables during a fire. It works by inhibiting the combustion process and reducing heat transmission to the protected cables. The coating envelops the protected cables with a fire-resistant and fire retardant jacket that protects against flame propagation and maintains circuit integrity during a fire.

Thermo-Lag 270 is an economical and maintenance-free way to protect cables from fire exposure. It is suitable for exterior and interior use to protect cables in electrical equipment, cable trays, and control rooms. It is a reliable and proven cable protection coating that is easily applied directly to cables.

Thermo-Lag 270 has successfully passed extensive 3rd party testing to IEC (International Electrotechnical Commission) standards and has been tested and approved by FM Global @ 63 mils (1.6 mm).

## APPLICATIONS

PETROCHEMICAL PLANTS  
POWER PLANTS  
STEEL & ALUMINUM MILLS  
MANUFACTURING FACILITIES

## FEATURES

- › Meets international and North American cable protection standards
- › FM Global approved for interior and exterior use
- › Tested to International Electrotechnical Commission (IEC) standards
- › 65-minute circuit integrity protection at 63 mils (1.6 mm)
- › 2-hour flame propagation protection at 63 mils (1.6 mm)
- › Class A (Class 1) rated for flame spread & smoke development
- › 0% Ampacity derating
- › Water-based
- › Flexible and durable
- › Allows easy replacement of cables
- › Manufactured to ISO 9001 standards

# Thermo-Lag 270

## Quality Product Backed by Quality Service

- › Carboline Company has been solving tough corrosion and fireproofing problems since 1947
- › Industrial service centers and sales offices located around the world
- › Over 20 worldwide manufacturing locations with a global network of sales and technical support
- › Industry leading field service and technical engineering support team
- › Certified to ISO 9001

## Thermo-Lag 270 Test Data

TEST METHOD	RESULTS	THICKNESS	LABORATORY
Circuit Integrity @ 1,940°F (1,060°C) (IEC 60331-11-21)	65 minutes*	63 mils (1.6 mm)	Exova Warringtonfire
Flame Propagation (IEC 60332-3-22)	120 minutes	63 mils (1.6 mm)	Intertek (ITS)
Flame Spread (ASTM E84)	Class A (Class 1)	63 mils (1.6 mm)	FM Global
Smoke Development (ASTM E84)	Class A (Class 1)	63 mils (1.6 mm)	FM Global
Ampacity (EPS 96202)	0% derating	63 mils (1.6 mm)	FM Global
Weathering (FM 3971)	Exterior rated	63 mils (1.6 mm)	FM Global
Halogen Gas Content (IEC 60754)	Pass (<5.0 mg/g HCl)	N/A	Intertek (ITS)
Accelerated Aging (DIN EN ISO 4892-2)	Passed (No loss in fire properties)	N/A	Intertek (ITS)

\* 90 minute circuit integrity can be achieved at a thickness of 118 mils (3.0 mm) based on alternate limiting temperature of 2,012°F (1,100°C).

## Thermo-Lag 270 Physical Data

TEST	12.6
Weight per Gallon	10.6 lb (4.8 kg)
Hardness (ASTM D2240)	Shore D 30-40
Flexibility	Excellent
Abrasion Resistance	Very Good
Impact Resistance	Excellent
Solids by Volume	53%
V.O.C.	0.24 lb/gal (28 g/l)
Coverage (Per Gallon)	13.5 ft <sup>2</sup> @ 1/16" (1.6 mm)
Shelf Life	12 Months

\*All values derived under controlled laboratory conditions.



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