



FXN ROPE - SAFETY DATA SHEET (SDS)

Prepared according to OSHA HazCom 2012 (29 CFR 1910.1200) & GHS

1: IDENTIFICATION

Product Name:	FXN Rope (Automatic Heat-Activated Fire-Suppression Rope)
Product Type:	Microcapsule-loaded suppression rope for electrical enclosures
Recommended Use:	Installed horizontally along the top interior of enclosed electrical/electronic cabinets to suppress early-stage electrical ignition.
Restrictions on Use:	Not for open flames, structural fires, outdoor unprotected environments, or occupied-space suppression.
Manufacturer:	FireXNull Inc.
Assembled By:	Approved production partner in South Korea
Address:	288 Borrego, Irvine, CA 92618
Emergency Phone (24/7):	(888) 969-0010

2: HAZARD IDENTIFICATION

GHS Classification:	Not classified as hazardous (manufactured article)
Hazards During Thermal Decomposition:	May release CO ₂ , CO, and HF traces
Signal Word:	None
Hazard Statements:	Heating may release irritating decomposition products.
Precautionary Statements:	Avoid inhaling fumes after activation; ventilate enclosure.



3: COMPOSITION / INFORMATION ON INGREDIENTS

The FXN Rope is a **solid manufactured article**. Chemical exposure does not occur during normal handling.

Core Clean Agent:	FK-5-1-12 (CAS 756-13-8)
Oxidizer Component (encapsulated & bound):	Potassium nitrate
Polymer Rope Matrix:	Polyvinyl alcohol, stabilizers, binders
Microcapsule Shell:	Urea-formaldehyde resin + gelatin
Adhesive/Resin Components:	Epoxy-based curing agents (bound form)
PFAS Status:	FK-5-1-12 is not listed under Proposition 65 and not classified as PFAS under current CA restrictions.

4: FIRST-AID MEASURES

Inhalation:	Move to fresh air; seek medical care if irritation persists.
Skin:	Wash with soap and water.
Eyes:	Rinse gently with clean water for several minutes.
Ingestion:	Rinse mouth; seek medical advice.

5: FIRE-FIGHTING MEASURES

Category	Details
Suitable Media:	Water spray, CO ₂ , dry chemical
Specific Hazards:	• Thermal decomposition may generate CO, CO ₂ , and HF.



Category	Details
	<ul style="list-style-type: none">• During activation, FXN Rope may reach high localized temperatures; avoid direct contact until fully cooled.
Protective Equipment:	SCBA recommended

6: ACCIDENTAL RELEASE MEASURES

Intact Product:	No special measures
Damaged/Activated Product:	Ventilate area, wear gloves and mask, remove residue

7: HANDLING & STORAGE

Handling:	Install horizontally at the top interior surface of the enclosure; do not crush, kink, or puncture the rope.
Storage Temperature	-40°F to +149°F (-40°C to +65°C)
Humidity Limit:	<80%
Shelf Life:	2 years unopened; 5 years after opening
Post-Activation Caution:	Do not touch FXN Rope immediately after activation; allow adequate cooling time.
PPE for Installation:	Wear protective gloves and safety glasses.
PPE for Post-Activation Handling:	Use heat-resistant gloves, a simple dust mask, and safety glasses.

8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation:	Normal ventilation adequate
PPE:	Gloves and safety glasses during installation; heat-resistant gloves, dust mask, and safety glasses after activation



9: PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Flexible polymer rope containing microcapsules
Diameter:	5–7 mm
Activation Temperature:	428°F ± 18°F (220°C ± 10°C)
Thermal Behavior During Activation:	Rope surface may become extremely hot; avoid contact until cooled.
Conductivity:	Non-conductive
Residue After Activation:	None

10: STABILITY & REACTIVITY

Stable under normal conditions

Avoid:	Excessive heat, UV exposure, humidity >80%
Decomposition Products:	CO, CO ₂ , HF traces

11: TOXICOLOGICAL INFORMATION

Acute Effects:	Mild irritation possible from decomposition fumes
Chronic Effects:	None known under normal exposure

12: ECOLOGICAL INFORMATION

Ozone Depletion:	Zero
Environmental Impact:	Solid manufactured article; not expected to release free chemicals during normal use



13: DISPOSAL CONSIDERATIONS

Classification: Non-hazardous solid waste
Disposal: Follow local regulations for solid composite disposal

14: TRANSPORT INFORMATION

Not regulated under DOT, IATA, or IMDG
Proper Shipping Name: Non-hazardous manufactured article

15: REGULATORY INFORMATION

OSHA HazCom: Article exemption applies
EPA SNAP: FK-5-1-12 approved
• FK-5-1-12 is not listed.
• Trace epoxy components (including BGE) may be present in cured/bound form.
California Prop 65:
• Due to encapsulation and article form, user exposure does **not** exceed Prop 65 "no significant risk" levels.
• No Prop 65 warning required under normal use.
UL Clarification: FXN Rope does **not** fall under any existing UL category or standard; UL confirmed no certification pathway exists.
OSFM: Listing not required (per official May 20, 2025 correspondence).



16: OTHER INFORMATION

Prepared by FireXNull Inc.

Revision Date: January 2025

This SDS aligns with the FXN Rope Technical Data Sheet (TDS).