



SAFETY DATA SHEET – FIRESTABLE NFPA 275 FS 2.0 B SIDE

SECTION 1, PRODUCT AND COMPANY IDENTIFICATION

Manufacturer:
Firestable Insulation Company
36 Plains Road, Essex, CT 06426
Phone: 860-767-8773 / Fax: 860-767-8779

Product: Firestable FS 2.0 B Side
Product Name: Fire-resistant Foam Resin
Chemical Name: Polyurethane Resin
Product Use: Two Component Water-Blown Spray Foam

Emergency Phone (24h): CHEMTREC: 1-800-424-9300

SECTION 2, HAZARDS IDENTIFICATION

Emergency overview

CAUTION:

Harmful if absorbed through the skin,
Causes respiratory track and severe skin and eye irritation
Contains material which causes damage to the central nervous system
Contains a material which can cause Kidney Damage
Contains a material suspected of causing genetic defects
Contains a material which can damage fertility or the unborn child
Harmful if swallowed

ROUTES OF EXPOSURE:

Inhalation, Skin and eye contact

POTENTIAL HEALTH EFFECTS: EYES

Avoid contact with eyes. Causes sever irritation

POTENTIAL HEALTH EFFECTS: SKIN

Do not ingest. Harmful if swallowed

POTENTIAL HEALTH EFFECTS: INGESTION

Avoid contact with skin. Harmful if absorbed through the skin

POTENTIAL HEALTH EFFECTS: INHALATION

Avoid breathing vapor or mist

Label elements

Hazard pictograms(s):



Signal word: Danger

SECTION 3, COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS #	%
Polyol blend	-	10-40
Tris(2-chloroisopropyl) phosphate	1244733-77-4	5-20
Surfactant	-	0.5-2
Amine Catalysts	-	0.5-4
Metal catalyst	1185-81-5	0.5-2
Flame retardant	-	5-25
Water	7732-18-5	0.5-2

SECTION 4, FIRST AID MEASURES



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General advice: Move out of dangerous area. Show this Safety Data Sheet to the doctor in attendance. Do not leave the victim unattended.

First Aid – Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes. Obtain medical attention immediately

First Aid – Skin Contact: Remove contaminated clothes and shoes. Wash exposed area with soap and water for at least 15 minutes. Do not use hot water. If irritation develops, seek medical attention

First Aid – Ingestion: If the product is ingested seek immediate medical attention or advice. Rinse mouth and then drink plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist immediate medical attention required.

Most important symptoms and effects, both acute and delayed: None known

SECTION 5, FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water, dry extinguishing media, carbon dioxide, foam.

Hazardous combustion products: May include nitrogen oxides, halogenated compounds, carbon oxides, phosphates and hydrogen chloride.

Further information: Standard procedure for chemical fires.

Protective equipment for Fire-Fighters: Firefighters should be equipped with full face, self-contained breathing apparatus and protective clothing.

SECTION 6, ACCIDENTAL RELEASE MEASURES

Personal precautions, Protective Equipment, and Emergency Response: Use personal protective equipment as recommended in section 8.

Environmental Precautions: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates drains, rivers or lakes inform respective authorities.

Methods and materials for containment and cleaning up: Ventilate the contaminated area. Soak up with inert absorbent material (sand, earth, sawdust). Keep in suitable, closed containers for disposal. Dispose of in accordance with federal, state, and local regulations in a permitted waste management facility.

Special Precautions: Avoid inhalation of vapors and mists. Surface may become slippery after spillage

SECTION 7, HANDLING AND RELEASE

Handling : Avoid contact with skin and eyes. Do not breath vapors/mists. For personal protection see section 8. Wash thoroughly after handling. Smoking, eating and drinking should be prohibited in the application area.

Storage: Store in cool/well-ventilated place protected from freezing, rain, direct sun light and excess heat. Keep container tightly closed. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks Do not store material near food, feed or drinking water.

SECTION 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ingredients	ACGIH TLV		OSHA PEL	
	TWA	STEL	PEL	STEL
Polyol blend	N/A	N/A	N/A	N/A
Tris(2-chloroisopropyl) phosphate	N/A	N/A	N/A	N/A
Surfactant	N/A	N/A	N/A	N/A
Amine Catalysts	N/A	N/A	N/A	N/A
Metal catalyst	N/A	N/A	N/A	N/A
Flame retardant	N/A	N/A	N/A	N/A
Water	N/A	N/A	N/A	N/A

Engineering control Advice: Provide local exhaust ventilation to control vapors/mists and maintain worker exposure below exposure limits.

Personal protective equipment:

Respiratory protection: If airborne concentrations are above the permissible exposure limit or are not known, use a NIOSH- certified respirator. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134).

Skin protection: Wear protective gloves/clothes. Use neoprene, nitrile or butyl rubber gloves when handling this product. Wear work clothes to prevent all skin contact.

Eye protection: Wear face shield or tightly fitting safety goggles (chemical goggles) if splashing hazard exists.

General safety and hygiene measures: Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice. Wear protective clothing as necessary to prevent contact. Avoid inhalation of vapors/mists. Wash soiled clothing immediately.

SECTION 9, PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid	Color: Gray(Cloud white foam) Black(charcoal foam)
Odor: Not Available	pH: Not Available
Melting point: Not Available	Boiling point: Not Available



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Flash point:	Not Available	Lower flammability:	Not Available
Upper flammability:	Not Available	Explosive properties:	Not Available
Auto-ignition temperature:	Not Available	Decomp. temperature:	Not Available
Vapor density:	Not Available	Rel. density/Spec. gravity:	1.28
Water Solubility:	Not Available	Solubility in other solvents:	Not Available
Viscosity:	1200-1800 cps @ 77°F		

SECTION 10, STABILITY AND REACTIVITY

Reactivity: No decomposition if stored and applied as directed.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: No decomposition if stored and applied as directed.

Hazardous decomposition: Carbon oxides, nitrogen oxides, halogenated compounds, phosphates, hydrogen chloride.

Conditions to avoid: Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.

SECTION 11, TOXICOLOGICAL INFORMATION

Ingredients	Acute Oral Toxicity LD50 (Rat)	Acute Inhalation Toxicity LC50 (Rat)	Acute Dermal Toxicity LD50 (Rabbit)	Repeated Dose Toxicity (Rat)
Polyol blend	>5,000 mg/kg	>31.26 mg/l, 4h	>5,000 mg/kg	N/A
Tris(2-chloroisopropyl) phosphate	>2,000 mg/kg	>7 mg/l, 4h	>2,000 mg/kg	N/A
Surfactant	>16,000 mg/kg	N/A	>2,000 mg/kg	N/A
Amine Catalysts	>500 mg/kg	N/A	>2,000 mg/kg	N/A
Metal catalyst	>2,000 mg/kg	N/A	>1,000 mg/kg	N/A
Flame retardant	>2,000 mg/kg	N/A	N/A	N/A
Water	N/A	N/A	N/A	N/A

Potential Acute Health Effects:

General information: Harmful if absorbed through the skin. Causes eye irritation. Causes respiratory tract and skin irritation.

Repeated Dose Effects: Contains a material which may cause birth defect. Contains a material which may cause damage to kidney and central nervous.

Skin corrosion/irritation: None identified

Carcinogenicity: None identified

Mutagenicity: None identified

Developmental Effects:

Information on: Diethylene Glycol: May be toxic to embryo/fetal development and teratogenic at high exposure levels.

SECTION 12, ECOLOGICAL INFORMATION

General information: The product has not been tested. Toxicological data for individual ingredients are presented below.

Ecotoxicity Data:

Ingredients	
Polyol blend	LC50: 160mg/l, 96h Lepomis macrochirus (Bluegill sunfish)
Tris(2-chloroisopropyl) phosphate	LC50: 56.2 mg/l, 96h, Fish; EC50: 131 mg/l, 48h, Daphnia magna; EC50: 82 mg/l, 72 h, Freshwater
Surfactant	LC50: 860 mg/l, 96h, Rainbow trout (Oncorhynchus mykiss); EC50: >930 mg/l, 48 h, Daphnia
Amine Catalysts	N/A



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Metal catalyst	EC50: 0.11 mg/l, 48h, Daphnia magna
Flame retardant	LC50: 100-1000 mg/l, 96 h, Zebra fish
Water	N/A

SECTION 13, DISPOSAL CONSIDERATION

Method of disposal:

Disposal of residual product: Do not dispose of waste into sewer. Do not contaminate soil, waterways, drains or sewers with chemical or used container. Send to licensed waste management company. Dispose in accordance with all applicable federal, state and local regulations.

Contaminated containers: Empty remaining containers. Dispose of as unused product. Do not re-use empty containers.

SECTION 14, TRANSPORTATION INFORMATION

International Transportation regulations: This product is not regulated as a hazardous material by the United States (DOT) or Canadian (TDG) transportation regulations.

SECTION 15, REGULATORY INFORMATION

EPCRA- Emergency Planning and Community Right-to-Know Act

CERCLA Reported Quantity:

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ

SARA 302:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA III, section 313.

Clear Air Act: The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

2,2'-oxydiethanol	111-46-6	0.114%
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This product does not contain any chemicals listed under the U.S. Clear Air Act, Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clear Act Air, Section 111 SOCM I Intermediate for Final VOC'S (40 CFR 60.489):

2,2'-oxydiethanol	111-46-6	0.114%
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California Prop 65:

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16, OTHER INFORMATION

Further information:

Prepared by: Chemistry Department, Firestable Insulation Company, USA

Phone: (860)767-8773

Revision date: 06/04/2018

Disclaimer: the information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designed and may not be valid for such material used in combination with any other materials or any process, unless specified in the text.