



Flame Seal Products, Inc.
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Flame Seal-TB™ Fire Retardant Coating Material Safety Data Sheet

Emergency Telephone #: 800-424-9300 (Chemtrec)

Section I – Product Information

Product Name: *Flame Seal-TB™ Listed Fire Retardant Coating*
Chemical Family: Aqueous based intumescent fire retardant
Manufacturer's Name: Flame Seal Products, Inc.
15200 West Drive
Houston, TX 77053 USA
Telephone # for Information: 713-668-4291

Section II – Hazardous Components

Component:		ACGIH	OSHA
<u>CAS Registry #</u>	<u>Wt. %</u>	<u>TLV</u>	<u>PEL</u>
Phosphoric Acid 7664-38-2	< 0.1%	500 ppm TWA 500 ppm STEL	400 ppm TWA 500 ppm STEL

Section III – Physical Properties

Appearance and Odor: White, odorless liquid
Molecular Weight: N/A
Boiling Point (°F): 212 – Not accurate: mixture of components
Melting Point (°F): N/A
Vapor Pressure (mm of Mercury): Not determined
Specific Gravity (Water=1): 1.33– 1.45
Vapor Density (Air=1): Not determined

Percent Volatile (by weight):	39.0% max. (water content only)
pH:	2.0 - 3.0
Solubility in Water:	Partial with heat. Has insoluble characteristic when cool.
Evaporation Rate (Butyl Acetate=1):	Not determined
Storage Temperature:	40-80 °F (4.44°C-26.67°C)
Shelf Life:	1 Year from Manufacturer Date

Section IV – Fire and Explosion Data

Flash Point (°F, Pensky-Martens Closed Cup):	None to boiling
Fire Extinguishing Media:	Not combustible (use water spray, fog, foam, dry chemicals, CO2 or other agents as appropriate for material in surrounding fire)
Flammable Limits (% by Volume):	N/A
Special Fire Fighting Procedures And Equipment:	Not combustible (use safety equipment and clothing which is suitable for materials in surrounding fire)
Unusual Fire And Explosion Hazards:	May liberate flammable hydrogen gas after long term storage of liquid in metal containers. Store liquid only in stainless steel, plastic or glass vessels.
Hazardous Decomposition Products:	Combustion products can include carbon dioxide, carbon monoxide, oxides of phosphorus and traces of ammonia.

Section V – Reactivity Data

Stability:	Stable <input checked="" type="checkbox"/> Unstable _____
Conditions to Avoid:	Storage of “liquid” in containers other than plastic, stainless steel or glass. Contamination with strong oxidizers, strong alkali or strong acids.
Incompatibility (materials to avoid):	Strong oxidizers, alkalis or acids. When in liquid state the product slowly reacts with some common metals causing flammable hydrogen gas to be emitted.
Hazardous Decomposition Products:	N/A
Hazardous Polymerization:	Will occur _____ Will not occur <input checked="" type="checkbox"/>

Section VI – Health Hazard Information

Exposure from Routine Use:	No evidence of adverse effects from available information
Effects of Overexposure:	Eyes: Direct contact or prolonged exposure to mist may cause redness and pain.

Nose: Breathing of heavy concentrations of mists may cause sinus irritation and dizziness.

Mouth: Ingestion may cause nausea.

Skin: Prolonged contact may cause reddening of effected area.

Probable Routes of Exposure: Skin, eyes, inhalation and ingestion.

Emergency And First Aid Procedures:

Eye Contact: Immediately flush eyes with water for at least 15 minutes including underneath eyelids. Consult a physician if irritation persists.

Skin Contact: Non-irritant; wash from skin.

Inhalation: Remove to fresh air immediately. Use adequate ventilation.

Ingestion: Substance exhibits very low toxicity. Consult a physician if upset stomach or nausea occurs.

Section VII – Toxicity Data

Oral: Acute Oral Toxicity: Ld50 (rat) > 5000 mg/kg

Dermal: Not established, not expected to be harmful. May be irritating with continual contact.

Inhalation: Not established. Not expected to be harmful. If necessary, use respirator if adequate ventilation is not possible to keep exposure to particulate matter at a minimum in heavy mist areas when spraying.

Other Pertinent Data: N/A

Section VIII – Special Protection Information

Personal Protection Equipment

Protective Gloves: Wear impervious gloves as necessary to avoid excessive skin contact (i.e. rubber or neoprene)

Eye Protection: Protective glasses or goggles in heavy mist areas

Respiratory Protection (Specify Type): For heavy mist exposure, use a NIOSH/MSHA approved respirator suitable for use with organic vapors if proper ventilation cannot be provided

Other Protective Equipment: Adequate clothing to minimize direct contact with skin

Ventilation

Local Exhaust: Use exhaust fans if necessary to control mist or vapor

Mechanical (general): Normal room ventilation of fans

Special: N/A

Section IX – Spill, Leak, and Disposal Procedures

Steps to be taken in case material is Released or Spilled:	Confine spilled material and absorb on sand, sawdust, earth or other available solids. Sweep and place in a suitable container. Flush with water and rinse minor spills into sewer if permitted by Federal, State and local regulations.
Waste Disposal Methods:	Mix excess Flame Seal-TB resin with T50-TB Curing Agent, allow to solidify completely, then dispose in accordance with disposal methods of local regulations for non-hazardous solid waste.
Clean Water Act Requirements:	Section 311 of the Clean Water Act lists phosphorus as a hazardous substance which, if discharged into or upon water, will present an imminent and substantial danger to public health and welfare. Spills of 5000 pounds or more must be reported to the National Response Center @ 1-800-424-8802.
Resource Conservation and Recovery Act (RCRA) Requirements:	No applicable information found

Section X – Regulatory Information

FDA:	No applicable information found
USDA:	No applicable information found
CPSC:	No applicable information found
TSCA:	All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements
CEPA (DSL):	All components of this product are on the DSL inventory or are exempt from reporting under the New Substances Notification Regulations
DOT:	No applicable information found Proper Shipping Name: N/A Hazardous Class: N/A Label Required: N/A Identification Number: N/A Other Pertinent Information: N/A

Section XI – Special Precautions and Comments

Precautions to be taken in Handling and Keep away from eyes. Avoid prolonged contact with skin.

Storing:	Wash exposed skin with soap and water. Avoid breathing of mist.
Other Precautions	N/A
Registration/Certifications	N/A

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