

MATERIAL SAFETY DATA SHEET**Manufacturer's Name:**Flame Safe Chemical Corporation
2653 Warfield Avenue
Fort Worth, Texas 76106**Emergency Telephone No.**

(800) 424-9300 CHEMTRIC

Information Telephone No.

(817) 740-9197 (800) 333-9197

SECTION I - PRODUCT IDENTIFICATION**Product Name and Synonyms:** Tree Safe**Chemical Family:** Aqueous based fire retardant**SECTION II - HAZARDOUS INGREDIENTS**

Component (Gas Registry No.)	Weight Percent	AGIH TLV	OSHA PEL
Phosphoric Acid	15.3%	1 ppm TWA	1 ppm TWA

SECTION III - PHYSICAL PROPERTIES**Appearance and Odor:** Clear, colorless, odorless liquid.
Becomes cloudy below 50°F (10°C)**Molecular Weight:** Not Applicable**Boiling Point:** (Degrees Fahrenheit) 212 not accurate;
mixture of components**Vapor Pressure: (mm of Mercury)** Not Determined**Melting Point:** (Degrees Fahrenheit) N/A**Specific Gravity (water=1)** 1.120 - 1.150**Vapor Density:** (air = 1) Not determined**PH:** 5.0 - 5.2**Evaporation Rate:** (Butyl Acetate=1; Not determined.
(<1) slower**Percent Volatile (by weight):** 71.9%**Solubility in Water:** Complete**SECTION IV - FIRE AND EXPLOSION DATA****Flash point (Degrees Fahrenheit: Pensky-Martins Closed Sup):** None to Boiling**Fire Extinguishing Media:** Not combustible. Use water spray, dry chemical, alcohol foam, carbon dioxide or other agents as appropriate for materials in surrounding fire. Water spray can be used to absorb gaseous formaldehyde and reduce irritating fumes.**Flammable Limits (Percent by Volume):** N/A**Special Fire Fighting Procedures and Equipment:** Use safety equipment and clothing which is suitable for phosphoric acid and materials in surrounding fire.**Unusual Fire and Explosion Hazards:** May liberate flammable hydrogen gas upon contact with many metals. Protect personnel against mist, vapor or splashes.**Hazardous Combustion Products:** Combustion product can include carbon dioxide, carbon monoxide, hydrogen, ammonia, hydrogen cyanide, methane, and oxides of phosphorus.**SECTION V - REACTIVITY DATA****Stability:** Stable**Conditions to Avoid:** Stable at normal storage conditions.
Contamination with strong oxidizers, strong alkalis, strong acids, urea or phenol**Incompatibility (Materials to Avoid):** Strong oxidizers, alkalis, or acids. Slowly reacts with some common metals causing highly flammable hydrogen gas to be emitted.**Hazardous Decomposition Products:** N/A**Hazardous Polymerization:** Will NOT occur

SECTION VI - HEALTH AND HAZARD INFORMATION**Exposure From Routing Use:** No evidence of adverse effects from available information.**Effects of Overexposure:** Prolonged contact with skin may cause reddening of affected area. Direct contact with the eyes causes redness, pain, conjunctivitis and with severe exposure possible corneal destruction.**Probable Routes of Exposure:** Inhalation, skin, eyes, ingestion.**Emergency and First Aid Procedures:****Eye Contact:** Rinse immediately with water. Remove contact lenses, then flush eyes immediately with running water for at least 15 minutes. Consult a Physician if irritation persists.**Inhalation:** Remove to fresh air immediately. Use adequate ventilation.**Ingestion:** Substance exhibits very low toxicity. Consult a physician if stomach or nausea occur.**SECTION VII - TOXICITY DATA****Oral:** Not established. Acute Oral Toxicity: LD50 (rat) <5000 mg/kg**Dermal:** Not established. Not expected to be harmful. May be irritating with continuous 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 to a minimum.**Other Pertinent Data:** Not Applicable**SECTION VIII - SPECIAL PROTECTION INFORMATION****Protective Gloves:** Wear impervious gloves as necessary to avoid contact, rubber, or neoprene**Eye Protection:** Protective glasses or goggles.**Respiratory Protection (Specify Type)** Use NIOSH/MSHA approved respirator suitable for use with inorganic acids and organic vapors if proper ventilation can not be provided.**Ventilation:** Local Exhaust - Use exhaust fans if necessary to control mist of vapor
Mechanical (general) - normal room ventilation offans
Special - Not applicable**Other Protective Equipment:** Adequate clothing to minimize chances of contact with skin.**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. Neutralize with soda ash and flush with water. Rinse minor spills into sewer if permitted by Federal, State, and local regulations.**Waste Disposal Methods:** Incinerate or bury in a suitable land fill where permitted by appropriate government regulations.**Clean Water Act Requirements:** Section 311 of the clean water act lists phosphorous as a hazardous substance which, if discharged into or upon water, will present an imminent and substantial danger to public health or welfare. Spill 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**Proper Shipping Name:** N/A**USDA:** No applicable information found**Hazard Class:** N/A**CPSC:** No applicable information found**Label Required:** N/A**TSCA:** No Applicable information found**Identification:** N/A**DOT:** No Applicable information found**Other Pertinent Information:** N/A

XI - SPECIAL PRECAUTIONS AND COMMENTS

Precautions to be Taken in Handling and Storing:

- Keep away from eyes
- Avoid breathing mist or vapor
- Avoid contact with skin or clothing
- Wash skin that contacted material with soap and water

Other Precautions: Not applicable

Registrations/Certifications: Not applicable

Effective Date: October 1, 1989

Supersedes: All previous

Important: The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered to your consideration, investigation and verification. Buyer assumes all risk of use, storage, and handling of the product in compliance with applicable federal, state, and local laws and regulations.

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