

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: Thatch Safe

SECTION II - HAZARDOUS INGREDIENTS

Component (Gas Registry No.)	Weight Percent	AGIH TLV	OSHA PEL
Formaldehyde (50-00-0)	5.3%	Max 1ppm TWA (8hr)	3ppm TWA (8hr)
Methanol (67-56-1)	2.1%	2 ppm STEL max 200ppm	5 ppm ceiling 10ppm peak
Phosphoric Acid	24.3%	1 ppm TWA	1 ppm TWA

SECTION III - PHYSICAL PROPERTIES

Appearance and Odor: Clear colorless liquid with a pungent odor

Molecular Weight: N/A

Boiling Point: (Degrees Fahrenheit) 208 not accurate; mixture of components

Vapor Pressure: (mm of Mercury) Not Determined

Melting Point: (Degrees Fahrenheit) N/A

Specific Gravity (water=1) 1.270

Vapor Density: (air = 1) Not determined

PH: 2.5 - 2.8

Evaporation Rate: (Butyl Acetate-1; Not determined. (>1))

Percent Volatile (by weight): 42.8%

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): Formaldehyde (gas) LEL=7 UEL=73

Special Fire Fighting Procedures and Equipment: Use self contained breathing apparatus and protection for skin. Use water spray to keep storage containers cool and to absorb evolved gaseous formaldehyde. 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. Irritating gaseous formaldehyde is evolved by hot material.

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: Formaldehyde vapors are released by hot solutions.	Hazardous Polymerization: Will not occur
---	---

SECTION VI - HEALTH AND HAZARD INFORMATION

Exposure From Routing Use: Formaldehyde vapors may cause irritation and inflammation of eyes and mucous membranes of the upper respiratory tract. Repeated skin contact may cause skin irritation, dermatitis or other allergic reactions. There is considerable individual variation in sensitivity to formaldehyde.

Effects of Overexposure: Severe exposure may cause nausea, pulmonary irritation and loss of consciousness. May be fatal if swallowed. 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. Vapors may cause pulmonary irritation and redness of the eyes.

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. Examination by a Physician is imperative.

Inhalation: Remove to fresh air immediately. Give oxygen or artificial respiration if necessary. Seek medical attention if necessary. Use adequate ventilation

Skin contact: Remove contaminated clothing. Promptly wash skin thoroughly with large quantities of soap and water for at least 5 minutes. If irritation persists, consult a physician. Launder contaminated clothing before use.

Ingestion: Induce vomiting immediately by giving a tablespoon of salt in a glass of warm water and repeat until fluid is clear. Call a physician. Never give anything by mouth to an unconscious person.

SECTION VII - TOXICITY DATA

Oral: Not established. Expected to be toxic. Acute Oral Toxicity: LD50 (rat) <5000 mg/kg

Dermal: Not established. May be irritating with continuous contact. Formaldehyde, LD50 (rabbit) - 270 mg/kg

Inhalation: Not established. Formaldehyde, TCLO (human) 8 ppm.

Carcinogenicity: The numerous epidemiological studies have failed to demonstrate a relationship between formaldehyde exposure and nasal cancer, or pulmonary diseases such as emphysema or lung cancer. Human experience has not indicated short-term effects other than irritancy, at mean levels of exposure of 1 ppm or below (Farber, Godberg, and Munro. Report of a Panel Review of Available Information of the Health Effects of Occupational Exposure to Formaldehyde, Ontario Ministry of Labor, 1/85). Rats exposed to 15 ppm of formaldehyde for 24 months in a laboratory study developed nasal cancer. Exposure of 6 ppm did not result in statistically significant levels of nasal cancer and none occurred at 2 ppm. Mice and hamsters in chronic studies have not developed nasal tumors, (ARC and NTP list formaldehyde as an animal carcinogen).

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 -if required to maintain TLVs
 Mechanical (general) - fans
 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. Call the National Response Center (800-424-9345) if spill is reportable quantity. Rinse minor spills into sewer if permitted by Federal, State, and local regulations.

Waste Disposal Methods: Formaldehyde and methanol are listed wastes under the federal hazardous waste regulations. Dispose of waste in compliance with all Federal, State and local regulation.

Clean Water Act Requirements: Formaldehyde is listed under Section 311 as a hazardous substance requiring the submission of the National Pollutant Discharge Elimination (NPDES) permit application to EPA. Formaldehyde is listed in Table B of testing requirements as a hazardous substance required to be identified by existing discharges, if expected to be present. 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: Formaldehyde (U122) is considered a hazardous waste if and when it is discharged by itself. As a constituent of this product the requirements of the federal hazardous regulations do not apply unless the waste fails to pass any of EPA's four tests for determining wastes.

SECTION X - REGULATORY INFORMATION

FDA: No applicable information found

TSCA: No Applicable information found

USDA: No applicable information found

DOT: No Applicable information found

CPSC: Labs required - Danger. May be Fatal if Swallowed. Causes Severe Burns. Liquid and Vapor irritating to Eyes, Nose, Mouth and Throat. May Cause Allergic Reactions. Contains 5.3% Formaldehyde. (See 9010.125 of Hazardous Substance Labeling Guides)

Proper Shipping Name: N/A

Hazard Class: N/A

Label Required: N/A

Identification: N/A

Other Pertinent Information: N/A

SPECIAL PRECAUTIONS AND COMMENTS

Precautions to be Taken in Handling and Storing:

- Keep away from eyes
- Avoid contact with skin or clothing
- Use only with adequate ventilation
- Avoid breathing mist or vapor
- Wash skin that contacted material with soap and water
- Do NOT use or store near heat or open flame

Other Precautions: Personnel handling formaldehyde must be trained in its use and for emergency situations. Provide safety showers and eyewash stations in areas of formaldehyde use.

Registrations/Certifications: No applicable information

Effective Date: August 24, 1988

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.

FLAME SAFE CHEMICAL CORPORATION MAKES NO WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, CONCERNING THE ACCURACY OR COMPLETENESS OF THE INFORMATION AND DATA HEREIN.

Flame Safe Chemical Corporation will not be liable for claims relating to any party's use or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete, or otherwise misleading.