

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Description: Fire Ribbon Paste

Intended Use: Fire Starter

Product Type Paste

Manufacturer's Identification

Murmac Paint Mfg.

1300 Harvey Street

Beloit, WI 53511

Emergency Contact

Chemtrac (800) 424-9300

Customer Service : Murmac Paint Mfg.

(608) 362-1900

SECTION 2: HAZARDS IDENTIFICATION

Classification of product or mixture

This product in an untested mixture GHS classification is based on the classification of the ingredients and their concentrations. Proprietary ingredients, if any, do NOT exhibit any health effects not listed in this SDS.

GHS Hazard Statements: Flammable Solid, Category 2

GHS precautionary Statements

Prevention: P210: Keep away from heat, hot surfaces, open flames, sparks, flames and other ignition sources. NO SMOKING.

P280: Wear protective coating

Response: P370 + P 378 In case of fire use water as first choice. Foam, dry chemical, CO₂, sand or earth.

Storage: None

Disposal: None

Hazards not otherwise classified (HNOC) or not covered but GHS: When igniting Fire Ribbon Paste, danger of skin burns may occur.

Additional Information

Primary Routes of Entry:

Skin: Yes

Skin Absorption: Yes

Eye Contact: Yes

Ingestion: Yes

Inhalation: Yes

Emergency Overview:

When igniting the Fire Ribbon Paste, care must be taken to prevent injury by burns to eyes and skin. When burned, fumes and smoke may be irritating to the respiratory track.

Inhalation of vapors from this product are harmful acutely and chronically.

Effects of Short-Term (Acute) Exposure:

The burning of this product will release gaseous compounds that are irritating to the respiratory track.

Inhalation of this product vapors may result in drowsiness or dizziness.

Skin Contact:

This product contains compounds which any cause skin irritation, causing redness and/or rash to occur.

If skin has contact with ignited product it will cause significant burns. Skin rash may occur quickly in

in persons predisposed to skin problems. Wash hands after handling this product to prevent residue

from being ingested by touching mouth. Unprotected skin may also absorb ingredients from this product

causing dizziness or drowsiness.

Eye Contact:

Smoke or vapors from the burning product may cause transient eye discomfort.

Ingestion:

Accidental ingestion is unlikely due to the form of the product. If product is ingested, compounds in this paste have target organ effects possibly causing depression of the central nervous system and damage to target organs. Immediately contact POISON CONTROL CENTER

Effects of long-Term (Chronic) Exposure:

Repeated or prolonged skin contact may cause defatting, redness and cracking.

SECTION 3: COMPOSITION

Mixture Composition

Component	% (W/W)	GHS Classification
Stoddard Solvent CAS No 64742-48-9 EINECS No 265-150-3	80.0-90.0	Aspiration Hazard, Category 1 Specific Target Organ
Bentonite, silicon Dioxide CAS No 14808-60-7 EINECS No 238-878-4	5.0-10.0	Carcinogenicity, Category 1A Specific Target Organ Toxicity, Category 1, Lungs
Ethanol, Ethyl Alcohol CAS No 64-17-5 EINECS No 200-578-6	2.0-5.0	Flammable Liquids, Category 2 Eye Irritant, Category 2A

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General Advice:

If ingested, immediately call POISON CONTROL CENTER 24 hrs. (800) 222-1222 doctor or nearest hospital for treatment advice. For burns, seek medical advice. Wash hands after handling.

Do not eat, drink or smoke until washing hands.

In Case of Eye Contact:

Immediately flush eyes with water for 10 minutes minimum. While rinsing eyes, hold eyelids open occasionally to more effectively cleanse the eye. Remove contact lenses, if safe to do so. If irritation occurs and persists, consult a doctor immediately.

In Case of Skin Contact:

Wash hands/skin immediately with soap and water after handling. Do not eat, drink or smoke until hands are thoroughly washed. If irritating occurs or persists seek medical advice.

If Inhalation:

Clear airway of the paste should accidental ingestion occur. Remove victim to fresh air. Do not give artificial respiration directly to the victim to avoid self contamination. If breathing is labored give oxygen. Seek medical attention if breathing is difficult or discomfort occurs.

If Ingested:

This product (Fire Ribbon) is orally toxic if ingested. If ingested immediately call a **Poison Control Center**, 24 hrs. (800) 222-1222 doctor or nearest hospital for treatment advice. Provided that the patient mouth with is conscious, rinse water. DO NOT give anything to an unconscious person. Do not induce vomiting to unless instructed do so by a physician or the poison control center. If spontaneous vomiting occurs, have the victim lean forward with head between knees to avoid aspirating vomit. Rinse mouth and give 2-4 cups of water, if conscious.

Most Important Symptoms and Effects, Both Acute and Delayed:

Effects of Short-Term (acute) Exposure

Inhalation:

The burning of this product will release gaseous compounds that are irritating to the respiratory tract. Inhalation of product vapors may result in drowsiness and/or dizziness.

Skin Contact:

This product contains compounds which any cause skin irritation, causing redness and/or rash to occur. If skin has contact with ignited product it will cause significant burns. Skin rash may occur quickly in in persons predisposed to skin problems. Wash hands after handling this product to prevent residue from being ingested by touching mouth. Unprotected skin may also absorb ingredients from this product

causing dizziness or drowsiness.

Eye Contact:

Smoke or vapors from the burning product may cause transient eye discomfort.

Ingestion:

Accidental ingestion is unlikely due to the form of the product. If product is ingested, compounds in this paste have target organ effects possibly causing depression of the central nervous system and damage to target organs. Immediately contact POISON CONTROL CENTER

Effects of Long-Term (chronic) Exposure:

Repeated or prolonged skin contact may cause defatting, redness and cracking.

Medical Conditions Aggravated by Exposure:

Persons who have a predisposition to skin problems may experience skin irritation. First signs of an adverse reaction may result in itchy skin.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media

Suitable extinguishing media:

Product is flammable. When ignited use foam, water or CO₂ where applicable.

Special Hazards Arising From Mixture:

When igniting, ensure care is taken not to burn the skin.

Advice for Fire Fighters:

In any situation, firefighters should wear full protective clothing including self contained breathing apparatus. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots and in enclosed spaces, SCBA.

Sensitivity to Impact: YES

Sensitivity to Static Charge YES

HAZARDOUS MATERIALS INFORMATION SYSTEM INDEX (HMIS)

HEALTH:	1
FLAMMABILITY:	3
REACTIVITY:	0
PERSONAL PROTECTION:	None

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures.

All spill responders involved in the clean up of this product must follow good industrial hygiene practices. A small spill can be handled routinely. Wear suitable protective equipment and eye protection to prevent skin and eye contact. Extinguish all sources of ignition and remove containers of Fire Ribbon Paste if safe to do so.

Respiratory Protection:

To avoid inhaling smoke/vapors, use a self-contained breathing apparatus.

Skin Protection:

Wear suitable protective equipment to prevent skin contact.

Eye and Face Protection:

Wear chemical goggles or full face protection.

Footwear:

No specific recommendations.

Environmental Precautions:

This product is unlikely to cause damage to the aquatic environment. Spills should not enter sewers or natural waterways.

Methods and Materials for Containment and Cleanup:

Immediately remove all sources of heat/ignition. Clean up spills immediately to protect human health and the environment. Scoop or sweep up material and place in an appropriate container for disposal. If on soil, skim the top layer of contaminated soil and place in an appropriate container for

disposal. Once the spill has been remediated, arrange for disposal of the containers. Properly label containers to identify contents. Spill area may be washed down with detergent and water. Do not use unprotected hands to collect spilled material. Ensure proper protective equipment is used to prevent contact with eyes and skin.

Large Spills:

Shovel spilled product into adequate compatible containers, skimming soil as well to ensure all released product and contaminated soil is recovered. Properly close and label all containers for disposal. Completely wash spill area with plenty of detergent and water.

Small Spills:

Scoop or sweep up material place in an appropriate container for disposal. If on soil, skim the top layer of contaminated soil and place in an appropriate container for disposal.

For additional disposal information see section 13

SECTION 7 : HANDLING AND STORAGE

Precautions for safe

Handling Procedures:

While handling Fire Ribbon paste, a residue on skin may be transferred by mouth by accident. Wash immediately and thoroughly after handling this product and before eating, drinking, smoking and before using the lavatory.

Conditions for Safe Storage:

Storage: KEEP OUT OF REACH OF CHILDREN AND ANIMALS. Keep container closed when not in use. Store in a cool dry, well ventilated area way from heat, flame, sources of ignition, direct sunlight, food (and related items)and clothing. Protect from sparks, heat or flame. Empty containers may contain residues which are hazardous. Always keep Fire Ribbon Paste in the original container. Store away from incompatible material such as strong oxidizers. In bulk storage areas, post "NO SMOKING" signs. Have appropriate fire extinguishers located in an accessible place near storage area. Keep containers closed when not in use. Prevent static discharges and use proper grounding procedures. Do not stack pallets more than three high.

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION

Control Parameters

Components with Workplace Control Parameters

Stoddard Solvent

Ethanol, CAS No 64-17-5

ACGIH* 5mg/ m³, TLV-TWA (oil mists)

OSHA Table z-1 Limits for air contaminants

Bentonite₁, CAS No 14808-60-7

TWA: 1000 ppm/1900 mg/m³

ACGIH TWA 0.025 mg/m³

ACGIH: American Conference of Government Industrial Hygienists. Exposure limits may vary from time to time and from one jurisdiction to another. Check with local regulatory agency for the exposure limits in your area.

OSHA: Occupational Safety and Health Administration.

Note: This ingredient is a filler bound into paste and is not free for exposure by inhalation.

Exposure Controls

Engineering Controls: Fire Ribbon Paste is designed to be used outdoors. Avoid breathing vapors from product or smoke from the flame, when ignited.

Respiratory Protection:

Not applicable for consumers provided instructions are followed. In circumstances of high concentration of smoke, a NIOSH approved air purifying respirator with N<P or R95 or HE filter and an organic vapor cartridge may be permissible.

Skin Protection:

Use solvent resistant gloves for skin protection if continued use of Fire Ribbon Paste is necessary.

Eye and Face Protection:

Not applicable for consumers provided instructions are followed.

Footwear:

No specific recommendation.

Control of Environmental Exposure:

None

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Appearance:	Opaque tan
Odor:	Naphtha odor
Odor Threshold:	Not applicable
pH:	Not determined
Melting Point/Frizzing Point:	Not determined
Initial Boiling Point:	Not determined
Flash Point:	Not determined
Evaporation Rate:	10°C (closed cup) , Stoddard Solvent
Flammability:	>1
Upper Exposure Limits:	Flammable
Lower Explosion Limits:	Not available
Vapor Pressure:	Not available
Vapor Density:	0.3 KPa @ 37.8°C
Relative Density:	Not available
Solubility:	Not available
Partition Coefficient:	Insoluble in water
Auto ignition Temperature:	Not available
Decomposition Temperature:	Not determined
Viscosity:	Not available
Explosive Properties:	Not available
Oxidizing Properties:	Not available
Percent Volatiles:	85-90

SECTION 10 : STABILITY AND REACTIVITY**Reactivity:**

May be reactive under conditions of heat.

Chemical Stability:

Stable under recommended storage conditions Storage should be in a dry, cool, well ventilated area away from incomplete materials, sources of ignition and heat, out of direct sunlight.

Possibility of Hazardous Reactions:

No known hazardous reactions.

Conditions to Avoid:

Heat, sparks, flames, sources of ignition which may initiate burning. During fire, irritating and possible toxic gases may be generated by thermal decomposition or combustion. Keep away from incapable materials

Incompatible Materials

Strong Oxidizing Agents.

Hazardous Decomposition Products:

Oxides of carbon as well as unknown irritation gases may be generated by thermal decomposition or combustion.

SECTION 11 : TOXICOLOGICAL INFORMATION

Information On Toxicological Effects

Acute Toxicity:

No GHS classification

Skin Irritation:

No GHS classification

Serious Eye Damage/Irritation:

No GHS classification

Respiratory or Skin Sensitization:

No GHS classification

Germ Cell Mutagenicity:

No GHS classification

Carcinogenicity:

No GHS classification

Reproductive Toxicity:

No GHS classification

Specific Target Organ Toxicity - Single Exposure:

No GHS classification

Specific Target Organ Toxicity - Repeated Exposure:

No GHS classification

Aspiration Hazard:

No GHS classification

Aquatic Toxicity:

No GHS classification

Additional Information

Component	LD ₅₀	LC ₅₀
Stoddard Solvent	>5000 mg/kg (oral/rat)	N/d
CAS No 64742-48-9	>3160 mg/kg (dermal/rabbit)	
Bentonite, silicon Dioxide CAS No 14808+60-7	N/d	N/d
Ethanol, Ethyl Alcohol	10470 mg/kg (oral/female rat)	30000 mg
CAS No 7723-14-0	15800 mg/kg (dermal/rabbit)	(rat/inh, 4 hr.)

SECTION 12 : ECOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity:

No GHS classification

Skin Corrosion/Irritation:

No GHS classification

Serious Eye Damage/Irritation:

No GHS classification

Respiratory or Skin Sensitization:

No GHS classification

Germ Cell Mutagenicity

No GHS classification

Carcinogenicity

No GHS classification

Reproductive Toxicity

No GHS classification

Specific Target Organ Toxicity- Single Exposure

No GHS classification

Specific Target Organ Toxicity- Repeated Exposure

No GHS classification

Aspiration hazard

No GHS classification

Aquatic Toxicity

Component	LD ₅₀	LC ₅₀
Stoddard Solvent	>5000 mg/kg (oral/rat)	N/d
CAS No 64742-48-9	>3160 mg/kg (dermal/rabbit)	
Bentonite, silicon Dioxide	N/d	N/d
CAS No 14808+60-7		
Ethanol, Ethyl Alcohol		
Ethanol, Ethyl Alcohol	10470 mg/kg (oral/female rat)	30000 mg
CAS No 7723-14-0	15800 mg/kg (dermal/rabbit)	(rat/in, 4 hr.)

Toxicity

Aquatic

Acute aquatic toxicity, not classifiable

Aquatic

Chronic aquatic toxicity, not classifiable

Stoddard Solvent: Toxicity to algae, no data

Stoddard Solvent: Toxicity to Fish LC₅₀ (Pimehales, Promelas, flathead minnow), 2200mg/1, 96 hr.

Persistence and Degradability:

No Data Available

Bio accumulative Potential:

No Data Available

Mobility in Soil:

No Data Available

Results of PBT and vPvB Assessment:

Not conducted

Other Adverse Effects:

No Data Available

SECTION 13: Disposal Consideration

Waste Treatment Methods

Product/Contaminating Packaging

Do not reuse empty containers. Dispose of product according to all applicable local and federal regulations. Offer to a licensed disposal company, properly contained and labelled.

SECTION 14: TRANSPORTATION INFORMATION

Transportation of Dangerous Goods (TDG and CLR)*: UN3175 SOLIDS CONTAINING FLAMMABLE

LIQUIDS, n.o.s. (Petroleum Naphtha), Class 4.1 PGII

United States department of transport Association (49CFR): UN 3175 solids containing flammable

liquid, n.o.s. (Petroleum Naphtha) class 4.1 PG II

International Air Transport Association (IATA): UN 3175 solids containing flammable

liquid, n.o.s. (Petroleum Naphtha) class 4.1 PG II

International Maritime Organization (IMO) UN 3175 solids containing flammable

liquid, n.o.s. (Petroleum Naphtha) class 4.1 PG II EmS No F-A, S-I, stowage Category B

*Shipped as Consumer Commodity in compliance with Transport Regulations

SECTION 15: REGULATORY INFORMATION

CERCLA Hazardous Substances List (40CFR 302.4) Not regulated.

SARA 302 Extremely hazardous substance: Not regulated.

SARA 311/312 Hazardous Chemical: Fire hazard, acute health hazard.

SARA 313 (TRI reporting): This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De minimis) reporting levels established by Title III, Section 313.

Other state Regulations:

Massachusetts Right to Know Components: None

Pennsylvania Right to Know Components: None

New Jersey Right to Know Components: Quartz (bentonite), CAS No 1488-60-7

Rev Date 1987-08-11

California prop 65 Components: This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

SECTION 16: OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct.

However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulation, and orders.

Disclaimer: The contents resulting from the reliance on the above information.

should only be used as a guide. Murmac Paint Manufacturing, Inc. disclaims any express or implied warranty as to the accuracy of the above info End of Document

In the event of a CHEMICAL EMERGENCY involving a spill, leak, fire, exposure or accident - 24 Hour

Telephone Emergency Contact: 1-800-424-9300 Chemtrec.

Dot label: N/A. Note: In containers of 119 gallons capacity or less this product is not regulated by DOT.