

Safety Data Sheet



Section 1 - Chemical Product and Company Identification

Product Identification

Name: TriLoc

Intended Use: Embalming

Manufacture: Trinity Fluids, LLC

Address: 550 Edwin Street
Westland, MI 48186

Phone: 810 441-8006

Emergency: 800 255-3924 (Chemtrec)



Section 2 - Hazard Identification

Emergency overview

DANGER! CONTAINS PARAFORMALDEHYDE

Harmful if ingested or inhaled. Minimize exposure to this material. Severe overexposure can result in injury or death. Irritating to eyes and skin. Inhalation causes irritation of the lungs respiratory system.

Potential acute health effects

Inhalation:

Exposure to respirable dust may cause respiratory tract and lung irritation and may aggravate existing respiratory conditions.

Ingestion:

Although not a likely route of entry, tests have shown that polyacrylate absorbents are non-toxic if ingested. However, as in any instance of non-food consumption, seek medical attention in the event of any adverse symptoms.

Skin:

Exposure to the dust, such as in manufacturing, may aggravate existing skin conditions due to drying effect.

Eyes:

Dust may cause burning, drying, itching and other discomfort, resulting in reddening of the eyes.

Over-exposure signs/symptoms:

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone.

Medical conditions

aggravated by overexposure:

Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200). See toxicological information (Section 11)

Section 3 - Composition/Information on Ingredients Identification

Component	CAS#	Percent (wt)
Paraformaldehyde	30525-89-4	3-9
Sodium Polyacrylate	9003-04-7	5-10

Section 4 - First Aid Measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Eye Contact:	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Skin Contact:	Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Inhalation:	Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Ingestion:	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
Note to physician:	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 5 - Fire Fighting Measures

Flammability of the product: No Flammability hazard known

Extinguishing media

Suitable: Use dry chemical, CO₂, water spray (fog) or foam, water
Not suitable: Not Know.

Special exposure hazards: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Hazardous combustion products:

Decomposition products may include the following materials:
carbon oxides

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6 - Accidental Release Measures

NO SPECIAL SPILL CLEAN -UP CONSIDERATIONS. COLLECT AND DISCARD IN REGULAR TRASH

Section 7 - Handling and Storage

Handling:

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not swallow. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Vapors are heavier than air and may spread along floors. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Storage:

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above the following temperature: 120F / 49C.

Section 8 - Exposure Controls/Personel Protection

Ingredient	OSHA TWA	OSHA STEL	ACGIH TWA	ACGIH STEL
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FORMALDEHYDE

Irritation Data:

150 ug/3 days intermittent skin-human mild; 2 mg/24 hours skin-rabbit severe; 540 mg open skin-rabbit mild; 50 mg/24 hours skin-rabbit moderate; 4 ppm/5 minutes eye-human; 1 ppm/6 minutes nonstandard exposure eye-human mild; 750 ug/24 hour eye-rabbit severe; 750 ug eye-rabbit severe; 10 mg eye-rabbit severe.

Toxicity Data:

17 mg/m³/30 minutes inhalation-human TCLO; 300 ug/m³ inhalation-man TCLO; 203 mg/m³ inhalation-rat LC50; 400mg/m³/2hours inhalation -mouse LC50; 400 mg/m³/2 hours inhalation-cat LCLO; 92 mg/m³ inhalation-mammal LC50; 270 mg/kg skin-rabbit LD50; 108 mg/kg oral-woman LDLO; 100 mg/kg oral-rat LD50; 42 mg/kg oral-mouse LD50; 260 mg/kg oral-guinea pig LD50; 420 mg/kg subcutaneous-rat LD50; 300 mg/kg subcutaneous-mouse LD50; 350 mg/kg subcutaneous-dog LDLO; 240 mg/kg subcutaneous-rabbit LDLO; 87mg/kg intravenous-rat LD50; 48 mg/kg intravenous-rabbit LDLO; 30 mg/kg intravenous-cat LDLO; 70 mg/kg intravenous-dog LDLO; 16 mg/kg intraperitoneal-mouse LDLO; 477 mg/kg unreported-man LDLO; 800 mg/kg parenteral-frog LDLO; mutagenic data (RTECS); reproductive effects data (RETCS); tumorigenic data (RTECS).

Carcinogenic Status:

OSHA carcinogen; anticipated human carcinogen (NTP); human limited evidence, animal sufficient evidence (IARC group-2A). Epidemiological studies and case reports indicate an excess occurrence of a number of cancers, but evidence for involvement for formaldehyde is strongest for nasal and nasopharyngeal cancer. A significant incidence of squamous cell carcinoma of the nasal cavity was induced in rats exposed in formaldehyde gas.

Local Effects: Corrosive - inhalation, skin , eye, ingestion.

Acute Toxicity Level: Highly toxic by inhalation, toxic by dermal absorption and ingestion.

Target Effects: Sensitizer - respiratory, dermal. Poisoning may also affect the kidneys.

At Risk from Exposure: Persons with asthma, chronic skin disease or preexisting lung disease.

Key to abbreviations

A = Acceptable Maximum Peak	S = Potential skin absorption
ACGIH = American Conference of Governmental Industrial Hygienists.	SR = Respiratory sensitization
C = Ceiling Limit	SS = Skin sensitization
F = Fume	STEL = Short term Exposure limit values
IPEL = Internal Permissible Exposure Limit	TD = Total dust
OSHA = Occupational Safety and Health Administration	TLV = Threshold Limit Value
R = Respirable	TWA = Time Weighted Average
Z = OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances	

Section 8 - Exposure Controls/Personel Protection

Recommended monitoring: procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
Engineering measures:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Hygiene measures:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
<u>Personal protection</u>	
Eyes:	Safety glasses with side shields.
Hands:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Respiratory:	If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Skin:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Environmental exposure: controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Section 9 - Physical and Chemical Properties

Physical state:	Liquid	Vapor Density:	Heavier than air
Flash point:	153°F	Volatility:	NA
Odor:	Pungent Formaldehyde	Evaporation rate:	INA
pH	6.7	% Solid. (w/w):	99.0+
Color:	Gray Granules		
Boiling/condensation point:	NA		
Specific gravity:	3.0		
Density (lbs / gal):	25.0		

Section 10 - Stability and Reactivity

Stability:	Stable under recommended storage and handling conditions (see Section 7).
Conditions to avoid:	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Materials to avoid:	Reactive or incompatible with the following materials: oxidizing materials, strong acids, strong alkalis.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization:	Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11 - Toxicological Information

This material has not been tested for toxicological effects.

Section 12 - Ecological Information

This material has not been tested for Ecogidacl effects.

Section 13 - Disposal Considerations

Waste disposal	The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
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Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to **Section 7: HANDLING AND STORAGE** and **Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION** for additional handling information and protection of employees. Section 6. Accidental release measures

Section 14 - Transport Information

Regulation	UN number	Proper shipping name	Classes	PG*	Additional information
UN	NA	Non-Regulated Material			
IMDG	NA	Non-Regulated Material			
DOT	NA	Non-Regulated Material			

PG* : Packing group

Section 15 - Regulatory Information

United States inventory (TSCA 8b) : All components are listed or exempted.

Canada inventory (DSL) ; All components are listed or exempted.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Canada

WHMIS (Canada) : Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Mexico

Flammability: 1 Health: 1 Reactivity: 0

U.S. Federal regulations :

CERCLA (Comprehensive Environmental Response, Compensation & Liability Act):

Section 102(A) - Hazardous Substances (40 CFR 302.4) - Listed Reportable Quantity - 1,000 lbs

Section 101(14) - Reportable Quantity - 1,000 lbs

SARA 313

Supplier notification

Chemical name

CAS number

Concentration

None

Section 16 - Other Information**Hazardous Material Information System (U.S.A.)**

Health: 2 * Flammability: 1 Physical hazards: 0
(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868. The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health: 2 Flammability:1 Instability: 0

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning this product, and to recommend precautionary measures for the storage and handling of the product. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.