SAFETY DATA SHEET

Section 1 – Product and Company Identification

THE EMBALMERS' SUPPLY COMPANY
5 Colton Road
East Lyme, CT 06333

INFORMATION: 860-739-4200
EMERGENCY PHONE (24hr) CHEMTREC: 800-424-9300
www.embalmers.com – info@embalmers.com

Trade Name: Epic Drainage
Product Type: Drainage Chemical

Product Code: 03000

Revision Date: Sep-14

Section 2 – Hazards Identification

Appearance: Red Liquid **Odor:** Floral Perfume

Emergency Overview: **DANGER!** Poison! May be fatal or cause blindness if swallowed. Vapor harmful. Harmful if swallowed, inhaled, or absorbed through skin. May cause respiratory and digestive tract irritation. May cause kidney damage. May cause central nervous system effects. May cause cardiac disturbances. This contains material that has caused adverse reproductive and fetal effects in animals.

Target Organs: Eyes, kidneys, heart, nervous system, optic nerve.

Potential Health Effects:

Inhalation: Methanol is toxic. Inhalation is the most common route of exposure. Causes CNS depression with nausea, headache, vomiting, dizziness and incoordination.
Ethylene Glycol may cause respiratory tract irritation. Vapor inhalation generally not a problem unless heated or misted. May cause nausea, vomiting, dizziness and drowsiness.

Ingestion: Methanol may be fatal or cause blindness if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression.
Ethylene Glycol may cause nausea and vomiting. Toxicity follows 3-stage progression: (1) involves central nervous system effecting including paralysis of eye muscles, convulsions, and coma. Metabolic acidosis and cerebral swelling may also occur. (2) involves cardiopulmonary system with symptoms of hypertension, rapid heart beat, and possible cardiac failure. (3) involves sever kidney abnormalities including possible renal failure.

Skin: May cause skin irritation. Low hazard for usual industrial handling. Penetration may occur.

Eyes: Splashes may cause irritation, pain, eye damage.

Potential chronic health effects

Chronic Exposure: Repeated small exposures by any route can cause severe kidney problems. Brain damage may also occur. Skin allergy can develop. May damage the developing fetus.

Aggravation of Pre-Existing Conditions:

Persons with pre-existing skin disorders, eye problems, or impaired liver, kidney, or respiratory function may be more susceptible to the effects of Ethylene Glycol.

Section 3 – Composition/Information on Ingredients

Ingredient Name:	CAS number	WT %
Ethylene Glycol	107-21-1	12.4
Methanol (Methyl Alcohol)	67-56-1	8.6

Section 4 – First Aid Measures

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Do not allow victim to rub or keep eyes closed. Chemical burns must be treated promptly by a physician. Get medical attention immediately.

Skin contact Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Inhalation Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Ingestion Potential for aspiration if swallowed. Get medical aid immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have victim lean forward.

Notes to physician Effects may be delayed. Ethanol may inhibit methanol metabolism.

Section 5 – Fire-fighting measures

General Information Ethanol may inhibit methanol metabolism. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapours may be heavier than air and may travel to a source of ignition and flash back. Vapours can spread along the ground and collect in low or confined areas. During a fire, irritation and highly toxic gases may be generated by thermal decomposition or combustion. Use a water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water.

Extinguishing media

Suitable For small fires use dry chemical, CO2, water spray, or alcohol resistant foam. For large fires, use water spray, fog or alcohol-resistant foam.

Non-suitable Do NOT use straight streams of water.

Section 6 – Accidental Release Measures

General Information Use proper personal protective equipment as indicated in section 8

Spill/Leaks Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Provide ventilation.

Section 7 – Handling & Storage

Handling Wash thoroughly after handling. Remover contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation.

Storage Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 – Exposure Control/Personal Protection

Ingredient Name:	**Occupational exposure limits**		
Ethylene Glycol	**AGCIH TLV Ceiling** 100 mg/m3 (aerosol)	**NIOSH** no established RELs see appendix D	**OSHA PEL STEL (15 mins)** None Listed
Methanol	**AGCIH TLV TWA** 200 ppm Skin – potential Significant contribution to overall exposure by the cutaneous route.	**NIOSH** 200 ppm TWA; 260 mg.m3 TWA 6000 ppm IDLH	**OSHA PEL STEL (15 mins)** 200 ppm TWA; 260 mg/m3 TWA

OSHA Vacated PELs: Ethylene Glycol: C 50 ppm; C 125 mg/m3
Methanol: 200 ppm TWA; 260 mg.m3 TWA

Engineering Use adequate general or local exhaust to keep airborne concentrations below the permissible exposure levels

Personal Protective Equipment

Eyes	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin	Wear appropriate protective gloves to prevent skin exposure.
Clothing	Wear appropriate protective clothing to prevent skin exposure.
Respirators	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN149. Always use a NIOSH or European EN149 approved respirator when necessary.

Section 9 – Physical & Chemical Properties

Appearance (physical state, color, etc.)	Red Liquid
Odor	Floural Fragrance
pH	7
Melting point/freezing point	Freezes below 0° C
Boiling point	Boils above 100° C
Flash point	76.1^{o} C (Tag Closed Cup)
Evaporation Rate	No Data
Famability (solid/gas)	Combustible liquid
Lower flammable limit	7.0%
Upper flammable limit	73.0%
Vapor pressure	92.0 mm Hg
Vapor density	>1 (Air = 1)
Relative density	1.028-1.030
Water solubility	Miscible
Partition coeffficent: n-octanol/water	water
Auto ignition temperature	No Data
Decomposition temperature	No Data
Viscosity	Similar to Water

Section 10 – Stability & Reactivity

Stability Stable under normal temperatures and pressures.

Conditions to avoid High temperatures, sources of ignition, incompatible materials.

Materials to avoid Oxidizing agents, reducing agents,

Hazardous Decomposition Products Thermal decomposition may produce carbon monoxide.

Section 11- Toxicological Information

Acute toxicity

Ingredient Name:			
Ethylene Glycol	LD50 Oral	Rat	4700 mg/kg
	LD50 Skin	Rabbit	9530 mg.kg
	Irritation Skin	Rabbit	555mg(open), mild
	Irritation Eye	Rabbit	500mg/24H, mild
Methanol	LD50 Oral	Mouse	7300 mg/kg
	LC50 Inhalation	Rat	64000 ppm/4H
	LDLo Oral	Human	143 mg/kg
	LdLo Dermal	Monkey	393 mg/kg

Other Toxicological Information

Carcinogenicity

Ingredient Name		
Ethylene Glycol	ACGIH	A4 – Not Classified
	IARC	Not Classified
	NTP	Not Classified
	OSHA	Not Classified
	EU	Not Classified
Methanol	ACGIH	Not Classified

IARC	Not Classified
NTP	Not Classified
OSHA	Not Classified
EU	Not Classified

Section 12 – Ecological Information

Environmental effects No known significant effects or critical hazards. Ethylene Glycol and Methanol are expected to biodegrade in soil and water very rapidly.

Aquatic Eco toxicity

Ingredient Name			
Ethylene Glycol	Fresh water	Acute LC50 8000 mg/L	Rainbow trout, donaldson trout
Methanol	Fresh Water	Acute EC 50 13,000 ,g/l/4/d	Rainbow trout, donadson trout
Other adverse effects	No known significant effects or critical hazards.		

Section 13 – Disposal Considerations

Waste disposal Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed
RCRA U-Series: Methanol: waste number U154 (Ignitable waste).

Section 14 – Transportation Information

The data in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulation to properly classify your shipment.

International transport regulations

Regulatory Information	**UN/NA number**	**Proper shipping name**	**Classes/*PG**	**Reportable Quantity (RQ)**
CFR	No Information available			
TDG	No Information available			
IMO/IMDG	No Information available			
IATA(Cargo)	No Information available			

*PG : Packing group

Section 15 – Regulatory Information

US regulations

TSCA CAS# 107-21-1 is listed on the TSCA inventory
CAS# 67-56-1 is listed on the TSCA inventory

SARA
Section 302 (RQ)
CAS# 107-21-1: final RQ = 5000 pounds (2270 kg)
CAS# 67-56-1: 5000 lb final RQ; 2270 kg final RQ
Section 302 (TPQ)
None of the chemicals in this product have a TPQ
SARA Codes: CAS# 107-21-1: acute, chronic.
SARA 313 – Supplier Notification
This product contains Ethylene Glycol (CAS# 107-21-1) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

This product contains Methanol (CAS# 67-56-1) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.
Clean Air Act: CAS# 107-21-1 is listed as a hazardous air pollutant (HAP). This product does not contain any Class 1 Ozone depletors. This product does not contain any Class 2 Ozone depletors.
CAS# 67-56-1 is listed as a hazardous air Pollutant (HAP). This product does not contain any Class 1 Ozone depletors. This product does not contain any Class 2 Ozone depletors.

Clean Water Act: None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA: None of the chemicals in this products are considered highly hazardous by OSHA.

State regulations CAS# 107-21-1 can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
California No Significant Risk Level: None of the chemicals in this product are listed.
CAS# 67-56-1 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.
California No Significant Risk Level: None of the chemicals in this product are listed.

Canada CAS# 107-21-1 is listed on Canada's DSL List. CAS# 127-21-1 has a WHMIS classification of D2A. CAS# 127-21-1 is listed on Canada's Ingredient Disclosure List.
CAS# 67-56-1 is listed on Canada's DSL List.
CAS# 67-56-1 is listed on the Canadian Ingredient Disclosure List

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XN **Risk Phrases:** R22 Harmful if swallowed.

Section 16 – Other Information

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