



LANOSOL MST - CO-INJECTION EMBALMING FLUID

Safety Data Sheet

Section 1: Identification

Product identifier

Product Name • Lanosol™ MST

Relevant identified uses of the substance or mixture and uses advised against

Recommended use • Arterial Co-Injection Embalming Fluid

Details of the supplier of the safety data sheet

Manufacturer • Kelco Supply
20000 176th Street NW
Big Lake, MN 55309
United States
www.kelcosupply.com
info@kelcosupply.com

Telephone (General) • 800-328-7720

Emergency telephone number

Manufacturer • 800-424-9300 - CHEMTREC

Manufacturer • 202-483-7616 - CHEMTREC International

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Flammable Liquids 3
Skin Irritation 2
Eye Irritation 2
Reproductive Toxicity 2
Specific Target Organ Toxicity Single Exposure 2
Specific Target Organ Toxicity Repeated Exposure 1

Label elements

OSHA HCS 2012

DANGER



Hazard statements • Flammable liquid and vapour
Causes skin irritation
Causes serious eye irritation
Suspected of damaging fertility or the unborn child.
May cause damage to organs.
Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

- Prevention** • Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
 Keep container tightly closed.
 Ground and/or bond container and receiving equipment.
 Use explosion-proof electrical/ventilating/lighting/equipment.
 Use only non-sparking tools.
 Take precautionary measures against static discharge.
 Do not breathe mists, vapours, and/or spray.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.

- Response** • In case of fire: Use appropriate media for extinction.
 If on skin: Wash with plenty of water .
 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
 Take off contaminated clothing and wash before reuse.
 Specific treatment, see supplemental first aid information.
 If skin irritation occurs: Get medical advice/attention.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 Get medical advice/attention if you feel unwell.

- Storage/Disposal** • Store in a well-ventilated place. Keep cool.
 Store locked up.
 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Other hazards

OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to: WHMIS

Classification of the substance or mixture

WHMIS

- Combustible Liquids - B3
 Toxic - D1B
 Other Toxic Effects - D2A
 Other Toxic Effects - D2B

Label elements

WHMIS



- Combustible Liquids - B3
 Toxic - D1B
 Other Toxic Effects - D2A
 Other Toxic Effects - D2B

Other hazards

WHMIS

- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Composition				
Chemical Name	Identifiers	%	Classifications According to Regulation/Directive	Comments
Methanol	CAS:67-56-1	N/A	OSHA HCS 2012: Flam. Liq. 2; Eye Irrit. 2A; Skin Irrit. 2; STOT SE 3: Narc.; STOT RE 1 (Eyes); STOT SE 2 (Eyes) Repr. 2	NDA
Proprietary	Proprietary	N/A	OSHA HCS 2012: Eye Irrit. 2	NDA
Proprietary	Proprietary	N/A	OSHA HCS 2012: Skin Irrit. 2; Eye Irrit. 2B	NDA

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin

- Wash skin with soap and water. Remove and isolate contaminated clothing. If irritation develops and persists, get medical attention.

Eye

- Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. If eye irritation persists: Get medical advice/attention.

Ingestion

- Give the victim two glasses of water. Induce vomiting (only in conscious persons) Following the vomiting, give water, milk or activated charcoal slurry. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Fire-Fighting Measures

Extinguishing media

- Suitable Extinguishing Media**
- SMALL FIRES: Dry chemical, CO₂, water spray or alcohol-resistant foam.
 - LARGE FIRES: Water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media

- No data available

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- Containers may explode when heated.
- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Many liquids are lighter than water.
- Vapors may form explosive mixtures with air.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapors may travel to source of ignition and flash back.
- Vapor explosion hazard indoors, outdoors or in sewers.
- Runoff to sewer may create fire or explosion hazard.

Hazardous Combustion Products

- No data available

Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
Wear positive pressure self-contained breathing apparatus (SCBA).
Move containers from fire area if you can do it without risk.
LARGE FIRES: Cool containers with flooding quantities of water until well after fire is out.

Section 6 - Accidental Release Measures**Personal precautions, protective equipment and emergency procedures****Personal Precautions**

- Ventilate enclosed areas. CAUTION: Victim may be a source of contamination. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Emergency Procedures

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Do not get water inside container. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up**Containment/Clean-up Measures**

- Stop leak if you can do it without risk.
Absorb small amounts on paper or rags and remove in a labeled, covered container. For large spills absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
Use clean non-sparking tools to collect absorbed material.
A vapor suppressing foam may be used to reduce vapors.
All equipment used when handling the product must be grounded.
LARGE SPILLS: Dike far ahead of liquid spill for later disposal.
LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Section 7 - Handling and Storage**Precautions for safe handling****Handling**

- Use only with adequate ventilation. Handle and open container with care. Keep away from heat, sparks, and flame. Take precautionary measures against static charges. All equipment used when handling the product must be grounded. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe mist, vapours and/or spray. Avoid contact with skin, eyes, and clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

Conditions for safe storage, including any incompatibilities**Storage**

- Keep container tightly closed. Store in a cool, dry, well-ventilated place. Keep away from fire.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA
Methanol (67-56-1)	TWAs	200 ppm TWA	200 ppm TWA; 260 mg/m ³ TWA	200 ppm TWA; 260 mg/m ³ TWA
	STELs	250 ppm STEL	250 ppm STEL; 325 mg/m ³ STEL	Not established

Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof electrical/ventilating/lighting/equipment.

Personal Protective Equipment

Respiratory

- Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear chemical splash safety goggles.

Skin/Body

- Wear appropriate gloves. Wear protective clothing - Splash apron

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits are based on 15-minute exposures

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Clear red liquid with mild odor.
Color	Clear red.	Odor	Mild
Odor Threshold	No data available		
General Properties			
Boiling Point	190 to 210 °C(374 to 410 °F)	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	No data available
Specific Gravity/Relative Density	> 1 Water=1	Water Solubility	Soluble
Viscosity	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	> 1 Air=1
Evaporation Rate	No data available	Volatiles (Wt.)	> 95 %
Volatiles (Vol.)	95 %		
Flammability			
Flash Point	140 °F(60 °C) CC (Closed Cup)	UEL	36 % (Methanol)
LEL	6 % (Methanol)	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			

Octanol/Water Partition coefficient	No data available		
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Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- Keep away from heat, sparks, and flame.

Incompatible materials

- Do not mix with strong oxidizing agents.

Hazardous decomposition products

- No data available

Section 11 - Toxicological Information

Information on toxicological effects

Components		
Proprietary (N/A)	Proprietary	Irritation: Skin-Human • 500 mg 7 Day(s) • Mild irritation; Skin-Human • 104 mg 3 Day(s)-Intermittent • Moderate irritation; Multi-dose Toxicity: Ingestion/Oral-Dog TDLo • 3650 mg/kg 2 Year(s)-Intermittent; Blood:Normocytic anemia; Blood:Other hemolysis with or without anemia; Skin-Human TDLo • 5 mg/kg 7 Day(s)-Intermittent; Skin and Appendages:After topical exposure:Primary irritation; Skin-Man TDLo • 0.03 mL/kg 22 Day(s)-Intermittent; Skin and Appendages:After topical exposure:Cutaneous sensitization (experimental)
Methanol (N/A)	67-56-1	Irritation: Eye-Rabbit • 100 mg 24 Hour(s) • Moderate irritation; Skin-Rabbit • 20 mg 24 Hour(s) • Moderate irritation; Mutagen: Cytogenetic analysis • Ingestion/Oral-Mouse • 1 g/kg; DNA damage • Ingestion/Oral-Rat • 10 µmol/kg; Reproductive: Inhalation-Mouse TCLo • 1500 ppm 6 Hour(s)(7-9D preg); Reproductive Effects:Specific Developmental Abnormalities:Central nervous system; Tumorigen / Carcinogen: Inhalation-Rat TCLo • 1000 ppm 2 Year(s)-Intermittent; Tumorigenic:Equivocal tumorigenic agent by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Tumorigenic:Increased incidence of tumors in susceptible strains

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • Data lacking
Skin corrosion/Irritation	OSHA HCS 2012 • Skin Irritation 2
Serious eye damage/Irritation	OSHA HCS 2012 • Eye Irritation 2
Skin sensitization	OSHA HCS 2012 • Data lacking
Respiratory sensitization	OSHA HCS 2012 • Data lacking
Aspiration Hazard	OSHA HCS 2012 • Data lacking
Carcinogenicity	OSHA HCS 2012 • Data lacking
Germ Cell Mutagenicity	OSHA HCS 2012 • Data lacking

Toxicity for Reproduction	OSHA HCS 2012 • Toxic to Reproduction 2
STOT-SE	OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 2
STOT-RE	OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 1

Potential Health Effects

Inhalation

- Acute (Immediate)** • High levels may cause dizziness, headache, nausea.
- Chronic (Delayed)** • No data available

Skin

- Acute (Immediate)** • Causes skin irritation.
- Chronic (Delayed)** • No data available

Eye

- Acute (Immediate)** • Causes serious eye irritation.
- Chronic (Delayed)** • No data available

Ingestion

- Acute (Immediate)** • No data available
- Chronic (Delayed)** • No data available

Other

- Acute (Immediate)** • Acute methanol toxicity in humans causes blurred vision, photophobia, and pains in the eyes. Depending on the amount of methanol consumed, the individual susceptibility and the time at which treatment began, these visual disturbances may either recede or develop within a few days into visual impairments or total blindness.
- Chronic (Delayed)** • The neurotoxic effects of methanol on the visual system can involve transient abnormalities such as peripapillary edema, optic disc hyperemia, diminished pupillary reactions to light, and central scotomata. Permanent ocular abnormalities include optic disc pallor, attenuation of arterioles, sheathing of arterioles, diminished pupillary reactions to light, diminished visual acuity, central scotomata, and other nerve fiber bundle defects.

Reproductive Effects

- Repeated and prolonged exposure may affect the reproductive system.

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

TD = Toxic Dose

Section 12 - Ecological Information

Toxicity

- Non-mandatory section - information about this substance not compiled for this reason.

Persistence and degradability

- Non-mandatory section - information about this substance not compiled for this reason.

Bioaccumulative potential

- Non-mandatory section - information about this substance not compiled for this reason.

Mobility in Soil

- Non-mandatory section - information about this substance not compiled for this reason.

Other adverse effects

- Non-mandatory section - information about this substance not compiled for this reason.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class (es)	Packing group	Environmental hazards
DOT	NDA	Consumer Comodity	ORM-D	NDA	NDA
TDG	NDA	NDA	NDA	NDA	NDA
IATA/ICAO	NDA	NDA	NDA	NDA	NDA

Special precautions for user • None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute, Chronic, Fire

Inventory				
Component	CAS	Canada DSL	Canada NDSL	TSCA
Proprietary	Proprietary	Yes	No	Yes
Methanol	67-56-1	Yes	No	Yes
Proprietary	Proprietary	Yes	No	Yes

Canada

Labor			
Canada - WHMIS - Classifications of Substances			
• Proprietary	Proprietary	Uncontrolled product according to WHMIS classification criteria	
• Methanol	67-56-1	B2, D1B, D2A, D2B (including 28%)	
• Proprietary	Proprietary	Not Listed	
Canada - WHMIS - Ingredient Disclosure List			
• Proprietary	Proprietary	1 %	

• Methanol	67-56-1	1 %
• <i>Proprietary</i>	<i>Proprietary</i>	0.1 %

Environment**Canada - CEPA - Priority Substances List**

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• Methanol	67-56-1	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

United States**Labor****U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• Methanol	67-56-1	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• Methanol	67-56-1	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

Environment**U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• Methanol	67-56-1	
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• Methanol	67-56-1	5000 lb final RQ; 2270 kg final RQ
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• Methanol	67-56-1	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• Methanol	67-56-1	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• Methanol	67-56-1	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• Methanol	67-56-1	1.0 % de minimis concentration
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Proprietary	Proprietary	Not Listed
• Methanol	67-56-1	Not Listed
• Proprietary	Proprietary	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• Proprietary	Proprietary	Not Listed
• Methanol	67-56-1	Not Listed
• Proprietary	Proprietary	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Proprietary	Proprietary	Not Listed
• Methanol	67-56-1	developmental toxicity, 3/16/2012
• Proprietary	Proprietary	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Proprietary	Proprietary	Not Listed
• Methanol	67-56-1	47000 µg/day MADL (inhalation); 23000 µg/day MADL (oral)
• Proprietary	Proprietary	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Proprietary	Proprietary	Not Listed
• Methanol	67-56-1	Not Listed
• Proprietary	Proprietary	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Proprietary	Proprietary	Not Listed
• Methanol	67-56-1	Not Listed
• Proprietary	Proprietary	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Proprietary	Proprietary	Not Listed
• Methanol	67-56-1	Not Listed
• Proprietary	Proprietary	Not Listed

Other Information

- WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Section 16 - Other Information

Revision Date

- 02/February/2016

Preparation Date

- 01/May/2012

Disclaimer/Statement of Liability

- The information on this Safety Data Sheet (SDS) has been compiled from 29 CFR 1910.1200, supplier SDS, other technical references and our testing and experience. Users are responsible for determining the suitability of this product and information for their circumstances and for knowing of and complying with all pertinent federal and state regulations.

Key to abbreviations

NDA = No Data Available