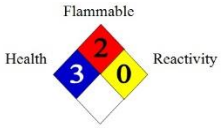
**NFPA & HMIS Ratings**




**Product Name: GLYOX (fumeless) CAVITY ENBALMING FLUID**

## Section 1 - PRODUCT AND COMPANY IDENTIFICATION

**Material Name**
GLYOX (fumeless) CAVITY EMBALMING FLUID
**Synonyms**
GLYOX (fumeless)
**Product Use**
Funeral Home Embalming Products.
**Restrictions on Use**
Only for use by Licensed Embalmers.
**Details of the supplier of the safety data sheet**

Dr. G.H. Michel - Restor-Skin Company
PO Box 337
202 Sixth Street
East Brady, PA 16028
Phone: 1-800-635-3403
Emergency Phone #: 1-724-526-3565
E-mail: fourcogs16028@yahoo.com

**Product Code**
Product size(s): 16 oz. (Pint) Bottles

## Section 2 - HAZARDS IDENTIFICATION

**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**
Flammable Liquids - Category 3
Acute Toxicity - Oral - Category 3
Acute Toxicity - Dermal - Category 4
Acute Toxicity - Inhalation - Vapor - Category 3
Skin Corrosion/Irritation - Category 1
Serious Eye Damage/Eye Irritation - Category 1
Respiratory Sensitization - Category 1A
Skin Sensitization - Category 1A
Germ Cell Mutagenicity - Category 1A
Carcinogenicity - Category 1A
Reproductive Toxicity - Category 1A
Specific Target Organ Toxicity - Single Exposure - Category 1 ( Central Nervous System , heart , kidneys , respiratory system , body , optic nerve , retina , systemic toxicity , eyes , nervous system )
Specific Target Organ Toxicity - Single Exposure - Category 2 ( adrenal gland , liver , lungs )
Specific Target Organ Toxicity - Single Exposure - Category 3
Specific Target Organ Toxicity - Repeated Exposure - Category 1 ( respiratory system , Central Nervous System , heart , kidneys , eyes , retina )
Specific Target Organ Toxicity - Repeated Exposure - Category 2
Hazardous to the Aquatic Environment - Acute - Category 3
Hazardous to the Aquatic Environment - Chronic - Category 3

**GHS Label Elements**

**Symbol(s)**

**Signal Word**

Danger

**Hazard Statement(s)**

Flammable liquid and vapor.
Toxic if swallowed.
Harmful in contact with skin.
Toxic if inhaled.
Causes severe skin burns and eye damage.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause genetic defects.
May cause cancer.
May damage fertility or the unborn child.
Causes damage to organs.
May cause damage to organs.
May cause respiratory irritation. May cause drowsiness or dizziness.
Causes damage to organs through prolonged or repeated exposure.
May cause damage to organs through prolonged or repeated exposure.
Harmful to aquatic life with long lasting effects.

**Precautionary Statement(s)**

**Prevention**

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep container tightly closed.
Keep away from heat/sparks/open flame/hot surfaces - No smoking.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Take precautionary measures against static discharge.
Use only non-sparking tools.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wear respiratory protection.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.

**Response**

In case of fire: Use appropriate media to extinguish.
Immediately call a POISON CENTER or doctor.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Specific treatment (see label).

**Storage**

Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Statement of Unknown Toxicity**

35.7539% of the mixture consists of ingredient(s) of unknown acute toxicity.

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| CAS | Component Name | Percent |
|---|---|---|
| 107-22-2 | Glyoxal | 40-50 |
| 107-21-1 | Ethylene glycol | 10-20 |
| 67-56-1 | Methyl alcohol | 10-20 |
| 50-00-0 | Formaldehyde | 5-10 |

The chemical identity and/or percentage of composition is being withheld as a trade secret.

## Section 4 - FIRST AID MEASURES

**Inhalation**

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

**Skin**

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Immediately call a POISON CENTER or doctor/physician. Take off contaminated clothing and wash before reuse.

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

**Ingestion**

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

**Most Important Symptoms/Effects**

**Acute**

Toxic if swallowed. Harmful in contact with skin. Toxic if inhaled. Causes severe skin burns and eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Causes damage to central nervous system, heart, kidneys, respiratory system, body, optic nerve, retina, systemic toxicity, eyes, and nervous system. May cause damage to adrenal gland, liver, lungs. May cause respiratory irritation. May cause drowsiness or dizziness.

**Delayed**

May produce an allergic reaction. May cause genetic defects. May cause cancer. May damage fertility or the unborn child. Causes damage to respiratory system, heart, kidneys, eyes, retina, and central nervous system through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure.

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically and supportively.

## Section 5 - FIRE FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media**

Carbon dioxide, dry chemical, alcohol-resistant foam, water spray.

**Unsuitable Extinguishing Media**

Do not use high-pressure water streams.

**Special Hazards Arising from the Chemical**

Flammable liquid and vapor.

**Hazardous Combustion Products**

Oxides of carbon, formaldehyde gas

**Fire Fighting Measures**

Move container from fire area if it can be done without risk. Dike far ahead of liquid spill for collection and later disposal. Do not point solid water stream directly into burning product to avoid spreading. Apply water from a protected location or from a safe distance. Cool containers with water spray until well after the fire is out. Vapors may travel to ignition source and flashback. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. ALWAYS stay away from tanks engulfed in fire. Avoid inhalation of material or combustion by-products. Containers may rupture or explode if exposed to heat.

**Special Protective Equipment and Precautions for Firefighters**

Wear personal protective clothing and equipment such as self-contained breathing apparatus (SCBA) for protection against possible exposure.

## Section 6 - ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

**Methods and Materials for Containment and Cleaning Up**

Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Wear fire/flame resistant/retardant clothing. Eliminate all sources of ignition. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Stop leak if safe to do so. Prevent entry into waterways, sewers, basements, or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb with earth, sand or other non-combustible material and transfer to container. Dike far ahead of liquid spill for collection and later disposal. Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces.

**Environmental Precautions**

Avoid release to the environment. Collect spillage.

## Section 7 - HANDLING AND STORAGE

**Precautions for Safe Handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flame/hot surfaces - No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/clothing and eye/face protection. Use only outdoors or in a well-ventilated area. Do not breathe vapor or mist. Wear respiratory protection. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Do not eat, drink or smoke when using this product.

**Conditions for Safe Storage, Including any Incompatibilities**

Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

Further information on storage conditions: Keep away from heat, sparks, open flame or other ignition sources. Keep away from incompatible materials.

**Incompatible Materials**

strong acids

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**Component Exposure Limits**

| | |
|---|---|
| **Glyoxal** | **107-22-2** |
| ACGIH: | 0.1 mg/m3 TWA inhalable fraction and vapor |
| **Ethylene glycol** | **107-21-1** |
| ACGIH: | 100 mg/m3 Ceiling aerosol only |
| Europe: | 20 ppm TWA ; 52 mg/m3 TWA |
| | Possibility of significant uptake through the skin |
| | 40 ppm STEL ; 104 mg/m3 STEL |
| Mexico: | 100 mg/m3 Ceiling aerosol |
| **Methyl alcohol** | **67-56-1** |
| ACGIH: | 200 ppm TWA |
| | 250 ppm STEL |
| | Skin - potential significant contribution to overall exposure by the cutaneous route |
| NIOSH: | 200 ppm TWA ; 260 mg/m3 TWA |
| | 250 ppm STEL ; 325 mg/m3 STEL |
| | Potential for dermal absorption |
| | 6000 ppm IDLH |
| Europe: | 200 ppm TWA ; 260 mg/m3 TWA |
| | Possibility of significant uptake through the skin |
| OSHA (US): | 200 ppm TWA ; 260 mg/m3 TWA |
| Mexico: | 200 ppm TWA VLE-PPT ; 260 mg/m3 TWA VLE-PPT |
| | 250 ppm STEL [PPT-CT ]; 310 mg/m3 STEL [PPT-CT ] |
| | Skin - potential for cutaneous absorption |
| **Formaldehyde** | **50-00-0** |
| ACGIH: | 0.3 ppm Ceiling |
| NIOSH: | 0.016 ppm TWA |
| | 0.1 ppm Ceiling 15 min |

| | |
|---|---|
| | 20 ppm IDLH |
| OSHA (US): | 0.75 ppm TWA |
| | 2 ppm STEL (See 29 CFR 1910.1048 ) 15 min ; 0.5 ppm Action Level (See 29 CFR 1910.1048 ); 0.75 ppm TWA (See 29 CFR 1910.1048 ) |
| | 2 ppm STEL (see 29 CFR 1910.1048 ) |
| Mexico: | 2 ppm Ceiling ; 3 mg/m3 Ceiling |

**EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures**

There are no biological limit values for any of this product's components.

**ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)**

**Methyl alcohol (67-56-1)**

15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)

**Engineering Controls**

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits.

**Individual Protection Measures, such as Personal Protective Equipment**

**Eye/face protection**

Wear chemical safety goggles with a face shield to protect against skin and eye contact when appropriate.

**Skin Protection**

Wear appropriate work clothing.

**Respiratory Protection**

Respiratory protection is required for not sufficiently ventilated working places and during the spraying processing.

**Glove Recommendations**

Wear appropriate chemical resistant gloves: neoprene, rubber gloves.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---|---|---|---|
| **Appearance** | clear liquid | **Physical State** | liquid |
| **Odor** | Antiseptic | **Color** | clear |
| **Odor Threshold** | Not available | **pH** | Not available |
| **Melting Point** | Not available | **Boiling Point** | 100 °C |
| **Boiling Point Range** | Not available | **Freezing point** | Not available |
| **Evaporation Rate** | Not available | **Flammability (solid, gas)** | Not available |
| **Autoignition Temperature** | Not available | **Flash Point** | 26.5 °C (79.7 °F) |
| **Lower Explosive Limit** | Not available | **Decomposition temperature** | Not available |
| **Upper Explosive Limit** | Not available | **Vapor Pressure** | Not available |
| **Vapor Density (air=1)** | Not available | **Specific Gravity (water=1)** | Not available |
| **Water Solubility** | 100 % | **Partition coefficient: n-octanol/water** | Not available |
| **Viscosity** | Not available | **Solubility (Other)** | Not available |
| **Density** | Not available | **Molecular Weight** | Not available |

**Other Information**

No additional information available for the product.

## Section 10 - STABILITY AND REACTIVITY

**Chemical Stability**

Stable under normal temperatures and pressures.

**Possibility of Hazardous Reactions**

Hazardous polymerization is not expected to occur.

**Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Keep away from incompatible materials.

**Incompatible Materials**

Strong acid.

**Hazardous decomposition products**

Oxides of carbon, formaldehyde gas

**Thermal decomposition products**

Oxides of carbon.

## Section 11 - TOXICOLOGICAL INFORMATION

**Information on Likely Routes of Exposure**

**Inhalation**

Toxic if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness.

**Skin Contact**

Harmful in contact with skin. Causes skin burns. May cause an allergic skin reaction.

**Eye Contact**

Causes serious eye damage.

**Ingestion**

Toxic if swallowed.

**Acute and Chronic Toxicity**

**Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

**Glyoxal (107-22-2)**

Oral LD50 Rat 200 mg/kg

Dermal LD50 Rabbit 12700 mg/kg

Inhalation LC50 Rat 2.44 mg/L 4 h

**Ethylene glycol (107-21-1)**

Oral LD50 Rat 4700 mg/kg

Dermal LD50 Rat 10600 mg/kg

**Methyl alcohol (67-56-1)**

Oral LD50 Rat 6200 mg/kg

Inhalation LC50 Rat 22500 ppm 8 h

**Formaldehyde (50-00-0)**

Oral LD50 Rat 100 mg/kg

Dermal LD50 Rabbit 270 mg/kg

Inhalation LC50 Rat 0.578 mg/L 4 h

**Product Toxicity Data**

**Acute Toxicity Estimate**

| | |
|---|---|
| Dermal | 1178.2469 mg/kg |
| Inhalation - Vapor | 2.2455 mg/L |
| Oral | 281.1796 mg/kg |

**Immediate Effects**

Toxic if swallowed. Harmful in contact with skin. Toxic if inhaled. Causes severe skin burns and eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Causes damage to central nervous system, heart, kidneys, respiratory system, body, optic nerve, retina, systemic toxicity, eyes, and nervous system. May cause damage to. adrenal gland liver, lungs. May cause respiratory irritation. May cause drowsiness or dizziness.

**Delayed Effects**

May produce an allergic reaction. May cause genetic defects. May cause cancer. May damage fertility or the unborn child. Causes damage to respiratory system, heart, kidneys, eyes, retina, and central nervous system through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure.

**Irritation/Corrosivity Data**

Causes severe skin burns and eye damage. May cause respiratory irritation. May cause drowsiness or dizziness.

**Respiratory Sensitization**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Dermal Sensitization**

May cause an allergic skin reaction.

**Component Carcinogenicity**

| **Glyoxal** | **107-22-2** |
|---|---|
| ACGIH: | A4 - Not Classifiable as a Human Carcinogen |
| DFG: | Category 3B (could be carcinogenic for man ) |
| **Ethylene glycol** | **107-21-1** |
| ACGIH: | A4 - Not Classifiable as a Human Carcinogen |
| **Formaldehyde** | **50-00-0** |
| ACGIH: | A2 - Suspected Human Carcinogen |
| IARC: | Monograph 100F [2012] ; Monograph 88 [2006] ; Monograph 62 [1995] ; Supplement 7 [1987] (Group 1 (carcinogenic to humans)) |
| NTP: | Known Human Carcinogen |
| DFG: | Category 4 (no significant contribution to human cancer ) |
| OSHA: | Present |
| OSHA: | see 29 CFR 1910.1048 |
| NIOSH: | potential occupational carcinogen |

**Germ Cell Mutagenicity**

May cause genetic defects.

**Tumorigenic Data**

No information available for the product.

**Reproductive Toxicity**

May damage fertility or the unborn child.

**Specific Target Organ Toxicity - Single Exposure**

Central Nervous System, heart, respiratory system, body, optic nerve, retina, systemic toxicity, eyes, nervous system, adrenal gland, liver, lungs

**Specific Target Organ Toxicity - Repeated Exposure**

respiratory system, Central Nervous System, heart, kidneys, eyes, retina

**Aspiration hazard**

No information available for the product.

**Medical Conditions Aggravated by Exposure**

No data available.

## Section 12 - ECOLOGICAL INFORMATION

**Ecotoxicity**

Harmful to aquatic life with long lasting effects.

**Component Analysis - Aquatic Toxicity**

| **Glyoxal** | **107-22-2** |
|---|---|
| Fish: | LC50 96 h Pimephales promelas 215 mg/L [static ] |
| Algae: | EC50 72 h Desmodesmus subspicatus >500 mg/L IUCLID ; EC50 96 h Desmodesmus subspicatus >500 mg/L IUCLID ; EC50 96 h Pseudokirchneriella subcapitata <=348.59 mg/L [static ] EPA |
| Invertebrate: | EC50 48 h Daphnia magna 404 mg/L IUCLID |
| **Ethylene glycol** | **107-21-1** |
| Fish: | LC50 96 h Oncorhynchus mykiss 41000 mg/L; LC50 96 h Oncorhynchus mykiss 14 - 18 mL/L [static ]; LC50 96 h Lepomis macrochirus 27540 mg/L [static ]; LC50 96 h Oncorhynchus mykiss 40761 mg/L [static ]; LC50 96 h Pimephales promelas 40000 - 60000 mg/L [static ]; LC50 96 h Poecilia reticulata 16000 mg/L [static ] |
| Algae: | EC50 96 h Pseudokirchneriella subcapitata 6500 - 13000 mg/L IUCLID |
| Invertebrate: | EC50 48 h Daphnia magna 46300 mg/L IUCLID |
| **Methyl alcohol** | **67-56-1** |
| Fish: | LC50 96 h Pimephales promelas 28200 mg/L [flow-through ]; LC50 96 h Pimephales promelas >100 mg/L [static ]; LC50 96 h Oncorhynchus mykiss 19500 - 20700 mg/L [flow-through ]; LC50 96 h Oncorhynchus mykiss 18 - 20 mL/L [static ]; LC50 96 h Lepomis macrochirus 13500 - 17600 mg/L [flow-through ] |
| **Formaldehyde** | **50-00-0** |
| Fish: | LC50 96 h Pimephales promelas 22.6 - 25.7 mg/L [flow-through ]; LC50 96 h Lepomis macrochirus 1510 µg/L [static ]; LC50 96 h Brachydanio rerio 41 mg/L [static ]; LC50 96 h Oncorhynchus mykiss 0.032 - 0.226 mL/L [flow-through ]; LC50 96 h Oncorhynchus mykiss 100 - 136 mg/L [static ]; LC50 96 h Pimephales promelas 23.2 - 29.7 mg/L [static ] |
| Invertebrate: | LC50 48 h Daphnia magna 2 mg/L IUCLID ; EC50 48 h Daphnia magna 11.3 - 18 mg/L [Static ] EPA |

**Persistence and Degradability**

No information available for the product.

**Bioaccumulative Potential**

No information available for the product.

**Mobility**

No information available for the product.

## Section 13 - DISPOSAL CONSIDERATIONS

**Disposal Methods**

Dispose in accordance with federal, state, provincial, and local regulations. The responsibility for proper waste disposal lies with the owner of the waste. Hazardous Waste Number(s): D001 (Ignitable), Toxic.

**Component Waste Numbers**

The U.S. EPA has not published waste numbers for this product's components

## Section 14 - TRANSPORT INFORMATION

**US DOT Information:**
**Shipping Name:** CORROSIVE LIQUIDS, TOXIC, N.O.S., (Contains: Formaldehyde , GLYOXAL )
**Hazard Class:** 8
**UN/NA #:** UN2922
**Packing Group:** III
**Required Label(s):** 8, 6.1

**IATA Information:**
**Shipping Name:** CORROSIVE LIQUID, TOXIC, N.O.S., (Contains: Formaldehyde , GLYOXAL )
**Hazard Class:** 8
**UN#:** UN2922
**Packing Group:** III
**Required Label(s):** 8, 6.1

**ICAO Information:**
**Shipping Name:** CORROSIVE LIQUID, TOXIC, N.O.S., (Contains: Formaldehyde , GLYOXAL )
**Hazard Class:** 8
**UN#:** UN2922
**Packing Group:** III
**Required Label(s):** 8, 6.1

**IMDG Information:**
**Shipping Name:** CORROSIVE LIQUID, TOXIC, N.O.S., (Contains: Formaldehyde , GLYOXAL )
**Hazard Class:** 8
**UN#:** UN2922
**Packing Group:** III
**Required Label(s):** 8, 6.1

**TDG Information:**
**Shipping Name:** CORROSIVE LIQUID, TOXIC, N.O.S., (Contains: Formaldehyde , GLYOXAL )
**Hazard Class:** 8
**UN#:** UN2922
**Packing Group:** III
**Required Label(s):** 8, 6.1

## Section 15 - REGULATORY INFORMATION

**U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

| | |
|---|---|
| **Ethylene glycol** | **107-21-1** |
| SARA 313: | 1 % de minimis concentration |
| CERCLA: | 5000 lb final RQ ; 2270 kg final RQ |
| **Methyl alcohol** | **67-56-1** |
| SARA 313: | 1 % de minimis concentration |
| CERCLA: | 5000 lb final RQ ; 2270 kg final RQ |
| **Formaldehyde** | **50-00-0** |
| SARA 302: | 500 lb TPQ |
| SARA 313: | 0.1 % de minimis concentration |
| CERCLA: | 100 lb final RQ ; 45.4 kg final RQ |
| OSHA (safety): | 1000 lb TQ |
| SARA 304: | 100 lb EPCRA RQ |

**SARA Section 311/312 (40 CFR 370 Subparts B and C)**

**Acute Health:** Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactivity:** No

**U.S. State Regulations**

The following components appear on one or more of the following state hazardous substances list:

| Component | CAS | CA | MA | MN | NJ | PA |
|---|---|---|---|---|---|---|
| **Glyoxal** | **107-22-2** | No | No | No | Yes | No |
| **Ethylene glycol** | **107-21-1** | Yes | Yes | Yes | Yes | Yes |
| **Methyl alcohol** | **67-56-1** | Yes | Yes | Yes | Yes | Yes |
| **Formaldehyde** | **50-00-0** | Yes | Yes | Yes | Yes | Yes |

**The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):**

WARNING! This product contains a chemical known to the state of California to cause cancer

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects

| | |
|---|---|
| **Ethylene glycol** | **107-21-1** |
| Repro/Dev. Tox | developmental toxicity , 6/19/2015 (ingested ) |
| **Methyl alcohol** | **67-56-1** |
| Repro/Dev. Tox | developmental toxicity , 3/16/2012 |
| **Formaldehyde** | **50-00-0** |
| Carc: | carcinogen , 1/1/1988 (gas ) |

**Canada Regulations**

**Canadian WHMIS Ingredient Disclosure List (IDL)**

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

| | | |
|---|---|---|
| **Glyoxal** | **107-22-2** | 1 % |
| **Ethylene glycol** | **107-21-1** | 1 % |
| **Methyl alcohol** | **67-56-1** | 1% |
| **Formaldehyde** | **50-00-0** | 0.1 % |

**Component Analysis - Inventory**

**Glyoxal (107-22-2)**

| US | CA | EU | AU | PH | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN | NZ | MX | TW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | DSL | EIN | Yes | Yes | Yes | No | Yes | No | Yes | Yes | Yes | Yes |

**Ethylene glycol (107-21-1)**

| US | CA | EU | AU | PH | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN | NZ | MX | TW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | DSL | EIN | Yes | Yes | Yes | No | Yes | No | Yes | Yes | Yes | Yes |

**Methyl alcohol (67-56-1)**

| US | CA | EU | AU | PH | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN | NZ | MX | TW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | DSL | EIN | Yes | Yes | Yes | No | Yes | No | Yes | Yes | Yes | Yes |

**Formaldehyde (50-00-0)**

| US | CA | EU | AU | PH | JP - ENCS | JP - ISHL | KR - KECI/KECL | KR - TCCA | CN | NZ | MX | TW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | DSL | EIN | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes |

## Section 16 - OTHER INFORMATION

**NFPA Ratings**

Health: 3 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**Summary of Changes**

New SDS: April 28, 2016 / SDS Update Rev 1: October 10, 2016 / SDS Update Rev 2: May 17, 2018

**Key / Legend**

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CFR - Code of Federal Regulations (US); CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC – European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KECI - Korea Existing Chemicals Inventory; KECL – Korea Existing Chemicals List; KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX – Mexico; NDSL – Non-Domestic Substance List (Canada); NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorization, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TCCA – Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW – Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); WHMIS - Workplace Hazardous Materials Information System (Canada).

**Other Information**

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