G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

1. PRODUCT IDENTIFIER

PRODUCT NUMBER(S)-----> 140800, 140890 and 141000

TRADE NAMES AND SYNONYMS> 1,1-oxydi-2-propanol, methyl-2(methyl-2) oxybispropanol, Oxydipropanol

1.2 RECOMMENDED USE: Industrial: Use in coatings, Use in lubricants, Use as binders and release agents, Water treatment chemicals, Use in cleaning agents, Metal working fluids, Functional fluids, A plasticizer, an intermediate in industrial chemical reactions, as a polymerization initiator or monomer, Use in coatings, Use in cleaning agents, Use in pulp, paper and paper products.

USES ADVISED AGAINST: No information available

CAS No: 25265-71-8 Chemical Family: Diols

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: G.J. CHEMICAL CO., INC.

Address: 40 VERONICA AVENUE

SOMERSET. NJ 08873

Telephone: 1-973-589-1450 Fax: 1-973-589-3072

1.4 Emergency Telephone Number

Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910 (OSHA HCS)
This material is not hazardous under the criteria of the Federal OSHA Hazard
Communication Standard 29CFR 1910.1200.
Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements Not a hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. INGREDIENTS

3.1 SUBSTANCE:

Ingredient	CAS No.	% by 'Range		CLASSIFICATION
Oxydipropanol RegNo. 01-2	25265-71-8 EC-No.246-770-3 119456811-38-XXXX	 99.0 	 Not : 	a hazardous substance or mixture.

No ingredients are hazardous according to OSHA criteria.

3.2 MIXTURE: Not applicable.

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

INHALATION: DIPROPYLENE GLYCOL

**<u>FIRST AID-</u> Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial respiration. Keep person warm and at rest. Treat symptomatically and supportively. Get medical attention immediately.

SKIN CONTACT: DIPROPYLENE GLYCOL

**FIRST AID- Remove contaminated clothing and shoes immediately.
Wash affected area with soap or mild detergent and large amounts or water until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.

EYE CONTACT: DIPROPYLENE GLYCOL

**FIRST AID- Wash eyes immediately with large amounts of water,

occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15-20 minutes). Remove contact lenses, if worn, after initial flush. Consult a physician if irritation persists.

INGESTION: DIPROPYLENE GLYCOL

**FIRST AID- Do not induce vomiting. Never give anything by mouth to an unconscious person. If large amounts are swallowed. Monitor for acidosis and central nervous system change. Exposed persons with previous kidney dysfunction may require special treatment. Consult a physician or poison control center, treat symptomatically.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED: Eye> Vapors and mists are mildly irritating; Symptoms tearing, irritation, stinging. Skin> Mildly irritating; Symptoms de-fatting of skin and irritation. May be harmful if absorbed through the skin.

Inhalation> May cause respiratory tract irritation.

Ingestion> Expected to be a low ingestion hazard. If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur. Chronic: May aggravate individuals with pre-existing liver or kidney disease. Medical Conditions Aggravated by Exposure> May aggravate pre-existing eye and kidney disease. Adverse reproductive effects have been reported in animals.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

Specific details on antidote: No recommendation given.

5. FIRE FIGHTING MEASURES

5.1 <u>SUITABLE EXTINGUISHING MEDIA</u>: Foam--> x CO2--> x Dry Chemical--> x Water-fog-->x Other-->

Unsuitable extinguishing media: Do not use waterjet. May spread fire.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Heat from fire can generate flammable vapor. This vapor mixed with air and exposed to ignition source can burn in open or explode if confined.

CONDITIONS OF FLAMMABILITY: Not flammable or combustible.

HAZARDOUS COMBUSTION PRODUCTS: Highly dependent on combustion

conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

Burning of this product will result in the release of toxic fumes.

5.3 <u>ADVICE FOR FIREFIGHTERS:</u> Shut off source. Water fog may be used to cool closed containers to prevent pressure build up. Wear NIOSH/MSHA approved self-contained breathing apparatus (SCBA) for confined spaces and where there is exposure to hot vapors. Use full fire-fighting protective clothing. If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

6.1 <u>PERSONAL PRECAUTIONS</u>, <u>PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES</u>: Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations.

6.2 ENVIRONMENTAL PRECAUTIONS:

Keep out of water sources, drains and sewers. Do not flush into surface water or sanitary sewer system

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

Methods for cleanup and containment:

Use explosion proof equipment. Shut off valves, contain spill, for small spills add non-flammable absorbent such as clay or silica in spill area. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent.

Methods for disposal:

Remove contaminated soil to remove contaminated trace residues. Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Flush with water to remove trace reside. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations. Keep all nonessential people away.

6.4 REFERENCE TO OTHER SECTIONS: See Sections 8 and 13.

7. HANDLING AND STORAGE

7.1 <u>PRECAUTIONS FOR SAFE HANDLING:</u> Avoid breathing vapors, mist or gas in top of shipping container. Use with adequate ventilation. Do not take internally. Avoid prolonged or repeated contact with skin, eyes, and clothing. Avoid work

practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities. Store large quantities only in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not store with incompatible materials. Keep containers closed when not in use. Hygroscopic. Store under inert gas.

<u>CONTAINER WARNINGS:</u> Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner.

7.3 SPECIFIC END USES: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROL (PERSONAL PROTECTION)

8.1 CONTROL PARAMETERS:

Ingredient	CAS No.	% by WT. Range	Exposure Limits	
Oxydipropanol	25265-71-8 EC-No.246-770-3	 99.0	 N.E. 	
RegNo. 01-2119	9456811-38-XXXX	i 		

Key: (PEL) = Permissible Exposure Limit OSHA

(TLV) = Threshold Limit Value OSHA & ACGIH (STEL) = Short Term Exposure Limit ACGIH

(WEEL) = USA. Workplace Environmental Exposure Levels

(TWA) = Time Weighted Average

CAS = Chemical Abstracts Registry Number IDLH = Immediate Danger to Life and Health

N.E. =None Established

8.2 EXPOSURE CONTROLS

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

<u>ENGINEERING CONTROLS:</u> Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

<u>RESPIRATORY PROTECTION:</u> The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA):

For known vapor concentrations use an air purifying NIOSH/MSHA Approved respirator with full face-piece and organic vapor cartridges. For high concentrations, and confined areas, and/or where vapor concentrations are unknown use a NIOSH/MSHA approved positive pressure full face-piece supplied air respirator (SCBA).

<u>BODY CLOTHING</u>: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse.

<u>SKIN PROTECTION</u>: Employee must wear appropriate protective gloves to prevent contact with this substance.

Full contact Gloves: Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm

Break through time: 480 min

<u>HYGIENE</u>: Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

<u>EYE/FACE PROTECTION</u>: Use safety eyewear with splash guards or face shield. Emergency shower and eyewash should be easily accessible to the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES: Dipropylene Glycol 25265-71-8

APPEARANCE: Clear oily liquid

COLOR: Colorless

ODOR: Little or No odor
ODOR THRESHOLD: No Data Available
pH: No Data Available

MOLECULAR WEIGHT: 134.17 amu
MELTING POINT: < -20°C (< -4°F)
BOILING POINT: 227°C (441°F)
SPECIFIC GRAVITY: 1.023 at 25°C

DENSITY (20°C): 1.023 g/ml @25°C (77°F) VAPOR PRESSURE: 0.03mmHG@25°C(77°F)

VAPOR DENSITY: 5.37

WATER SOLUBILITY: Complete

PARTITION COEFFICIENT N- log Pow: -0.46 at 21.7°C (71.1°F)

OCTANOL/WATER

FLASH POINT: 130°C (266°F) - closed cup

EVAPORATION RATE (BUTYL ACETATE=1):No data available

UPPER FLAMMABILITY LIMIT: 12.6% (V)
LOWER FLAMMABILITY LIMIT: 2.9% (V)
AUTO INGNITION TEMPERATURE: 332 °C (630°F)
DECOMPOSITION TEMPERATURE: No data available
VISCOSITY: No data available
EXPLOSIVE PROPERTIES: No data available
OXIDIZING PROPERTIES: No data available

9.2 OTHER INFORMATION:

Surface tension: 71.4 mN/m at 1.01 at 22 °C (72 °F)

10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: No data available.

10.2 CHEMICAL STABILITY: Unstable () Stable (X)

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: No data available

HAZARDOUS POLYMERIZATION: May occur () Will not occur (X)

- 10.4 <u>CONDITIONS TO AVOID</u>: Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems. Avoid moisture. Avoid direct sunlight or ultraviolet sources.
- 10.5 <u>INCOMPATIBLE MATERIALS</u>: Strong oxidants such as liquid chlorine, oxygen, sodium hypochlorite, inorganic acids e.g. hydrochloric acid hydrogen peroxide.
- 10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, aldehydes.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x Eye--> x

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Eye> Vapors and mists are mildly irritating; Symptoms tearing, irritation, stinging.

Skin> Mildly irritating; Symptoms de-fatting of skin and irritation. May be harmful if absorbed through the skin.

Inhalation> May cause respiratory tract irritation.

Ingestion> Expected to be a low ingestion hazard. If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur.

Chronic: May aggravate individuals with pre-existing liver or kidney disease.

Medical Conditions Aggravated by Exposure May aggravate pre-existing eye and kidney disease. Adverse reproductive effects have been reported in animals.

ACUTE TOXICITY:

The effects of overexposure shown in Section II are based on acute toxicity profiles. Typical values are:

Ingredient	Oral LD50 (Rat)	Skin LD50 (Rabbit) Inhalation LC50	
Dipropylene Glycol	 >5000mg/kg 	 >5010g/kg 	 >2.34mg/L/4h Rat - vapor 	

Skin corrosion/irritation Skin: Rabbit Result: No skin irritation

Serious eye damage/eye irritation: May cause slight temporary eye irritation.

Respiratory or skin sensitization: Buehler Test - guinea pig: Did not cause sensitization on laboratory animals.

MUTAGENIC EFFECTS: In vitro assay lymphocyte Result: negative

CARCINOGEN STATUS:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. NTP: No component of this product present at levels greater than or equal to

0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

REPRODUCTIVE TOXICITY: Reproductive toxicity - rat - Oral Maternal Effects: Other effects.

Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): no data available

Specific target organ toxicity (STOT-RE) - repeated exposure (Globally Harmonized System): In animals, effects have been reported on the following organs after ingestion: Kidney. Nasal tissue.

ASPIRATION HAZARD: No Data Available

11.2 ADDITIONAL DATA: Repeated dose toxicity - rat - male - Oral - No observed adverse effect level - 470 mg/kg

Repeated dose toxicity - rat - female - Oral - No observed adverse effect level - 530 mg/kg

prolonged or repeated exposure can cause:, Central nervous system depression, Nausea. Headache. Vomiting

RTECS: UB8765000

12. **ECOLOGICAL INFORMATION**

12.1 AQUATIC TOXICITY (Acute):

Toxicity to fish:

LC50 - Carassius auratus (goldfish) - > 5,000 mg/l - 24 h

Toxicity to daphnia and other aquatic invertebrates: static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h

Toxicity to algae:

EC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h

- 12.2 PERSISTANCE AND DEGRADABILITY: aerobic Exposure time 28 d Result: 84.4 % Readily biodegradable. (OECD Test Guideline 301F) Biological Oxygen Demand (BOD): No Data Available
- 12.3 <u>BIOACCUMULATIIVE POTENTIAL</u>: Cyprinus carpio (Carp) 3 mg/l Bio-Concentration Factor (BCF): 0.3 4.6, (OECD Test Guideline 305C)
- 12.4 MOBILITY IN SOIL: No data available.

12.5 RESULTS OF PBT AND vPvB:

PBT assessment results: This substance is not classified as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: No data available

13. **DISPOSAL CONSIDERATIONS**

13.1 <u>WASTE TREATMENT METHODS:</u> Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations.

CONTAMINATED PACKAGING: Dispose of as unused product.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

14. TRANSPORT INFORMATION

Land Transport (DOT)
14.1 USDOT ID Number> N/A
14.2 USDOT Shipping Name> Not DOT Regulated
Not Dangerous Goods
14.3 USDOT Hazard Classification> N/A
USDOT Label Codes> N/A
14.4 USDOT Package Code> N/A
14.5 Environmental hazard> No
14.6 Special precautions for user> None
The openin procument for account to the contract of the contra
Sea Transport (IMDG)
14.1 UN Number:> N/A
14.2 Proper Shipping Name> Not Dangerous Goods
14.3 Hazard Class:> N/A
USDOT Label Codes> N/A
14.4 Packing Group:> N/A
14.5 Environmental hazard> No
Air Transport (IATA)
14.1 UN Number:> N/A
14.2 Proper Shipping Name:> Not Dangerous goods
14.3 Hazard Class:> N/A
USDOT Label Codes> N/A
14.4 Packing Group:> N/A
14.5 Environmental hazard> No
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15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

SARA TITLE III (Superfund Amendment and Reauthorization Act)

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355) - Not Listed

SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) - Not Listed SECTION 311/312: Hazard Categorization (40 CFR 370) - Chronic Health

<u>CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)</u>

SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Not Listed Reportable Quantity – None SECTION 101(14) Reportable Quantity: None

Massachusetts Right to Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components Oxydipropanol CAS-No.25265-71-8

New Jersey Right to Know Components Oxydipropanol CAS-No.25265-71-8

California Prop. 65 Components

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

TSCA (Toxic Substance Control Act)

Oxydipropanol CAS No.- 25265-71-8 is listed on the TSCA Inventory.

15.2 CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment has been carried out for this substance.

16. OTHER INFORMATION:

HMIS (Hazardous Materials Identification System)

Hazard Rating:

4-Extreme

3-High

2-Moderate

1-Slight

0-Insignificant

NFPA RATINGS (SCALE 0-4): Health=1 Fire=1 Reactivity=1

HMIS RATINGS (SCALE 0-4): Health=1 Fire=1 Reactivity=1 PPE=B

Hazard statement(s) from Section 2 and 3:

Not a hazardous substance or mixture.

Date of preparation----> May 13, 2009

Revision Number----> 1.4

Revision Conrent-----> Updated Sections: 1, 8, 11, and 16.

Revision Date----> April 16, 2019

Prepared by-----> T.G.Fenstermaker, Jr.

Acronyms:

ACGIH - American Conference of Governmental Industrial Hygenists

AIHA - American Industrial Hygiene Association
ANSI - American Nation Standards Institute

API - American Petroleum Institute

CERCLA - Comprehensive Emergency Response, Compensation, and Liability Act

DOT - U.S. Department of Transportation

EPA - U.S. Environmental Protection Agency

HMIS - Hazardous Materials Information System

IARC - International Agency For Research On Cancer

MSHA - Mine Safety and Health Administration NFPA - National Fire Protection Association

NIOSH - National Institute of Occupational Safety and Health

NOIC - Notice of Intended Change (Proposed change to ACGIH TLV)

NTP - National Toxicology Program
OPA - Oil Pollution Act of 1990

OSHA - U.S. Occupational Safety & Health Administration

PEL - Permissible Exposure Limit (OSHA)
RCRA - Resource Conservation and Recovery Act
REL - Recommended Exposure Limit (NIOSH)

SARA - Superfund Amendments and Reauthorization Act of 1986 Title III

SCBA - Self-Contained Breathing Apparatus

STEL - Short-Term Exposure Limit (generally 15 minutes)

TLV - Threshold Limit Value

TSCA - Toxic Substances Control Act TWA - Time Weighted Average (8hr.)

WHMIS - Canadian Workplace Hazardous Materials Information System

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