

Safety Data Sheet

Material Name: DIPROPYLENE GLYCOL METHYL ETHER

SDS ID: 820255

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name Dipropylene glycol methyl ether

Product Use Solvent. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

Restrictions on Use None known.

Details of the supplier of the safety data sheet

Safety-Kleen Systems, Inc. 2600 North Central Expressway Suite 200 Richardson, TX 75080 Phone: 1-800-669-5740 Emergency Phone #: 1-800-468-1760 www.safety-kleen.com Issue Date June 23, 2016 Supersedes Issue Date NA

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Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

Carcinogenicity – Category 2 Flammable liquid – Category 4 GHS Label Elements

Symbol(s)



Signal Word Warning Hazard Statement(s) Combustible liquid Suspected of causing cancer

Precautionary Statement(s)

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from flames and hot surfaces – No smoking. Wear protective gloves/protective clothing/eye protection/face protection.

Response

If exposed or concerned, get medical advice/attention. In case of fire use regular dry chemical, carbon dioxide, water, regular foam.

Storage

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

Disposal

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

Other Hazards

None known.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent	
34590-94-8	Dipropylene glycol methyl ether	98-100	
68476-31-3	High boiling hydrocarbons	<2	

Section 4 - FIRST AID MEASURES

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical attention, if needed.

Skin

IF ON SKIN (or hair): Wash with plenty of soap and water. Get medical attention, if needed.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention, if needed.

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Most Important Symptoms/Effects

Acute

Suspected of causing cancer.

Delayed

Repeated exposure may cause skin dryness or cracking. Ingesting large amounts may cause liver and kidney injury.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Regular dry chemical, carbon dioxide, water, regular foam.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Special Hazards Arising from the Chemical

Combustible liquid. Vapors may form explosive mixtures with air. Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back. Runoff to sewer may cause a fire or

explosion hazard. Containers may rupture or explode. Empty product containers may contain product residue and be dangerous.

Hazardous Combustion Products

Decomposition and combustion materials may be toxic. Burning may produce oxides of carbon.

Fire Fighting Measures

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. 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. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible withdraw from area and let fire burn.

Special Protective Equipment and Precautions for Firefighters

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

Methods and Materials for Containment and Cleaning Up

Eliminate all ignition sources if safe to do so. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Stop leak if possible without personal risk. Prevent entry into waterways, sewers, basements, or confined areas. A vapor suppressing foam may be used to reduce vapors. Keep unnecessary people away, isolate hazard area and deny entry. Ventilate the area. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal. Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal. There may be specific regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see SECTION 15: REGULATORY INFORMATION.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Handle in accordance with good industrial hygiene and safety procedures. Keep away from heat/sparks/open flame/hot surfaces - No smoking. Keep container tightly closed. 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/clothing and eye/face protection. Wash thoroughly after handling. Do not breathe dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Avoid contact with eyes, skin and clothing.

Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Further information on storage conditions: Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous.

Incompatible Materials

Oxidizing materials, combustible materials.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

DIPROPYLENE GLYCOL METHYL ETHER	34590-94-8
ACGIH:	100 ppm TWA
	150 ppm STEL
	Skin potential - significant contribution to overall exposure by the cutaneous route
NIOSH:	100 ppm TWA; 600 mg/m3 TWA
	150 ppm STEL; 900 mg/m3 STEL
	Potential for dermal absorption
	600 ppm IDLH
Europe:	50 ppm TWA; 308 mg/m3 TWA
	Possibility of significant uptake through the skin
OSHA (US):	100 ppm TWA; 600 mg/m3 TWA
	prevent or reduce skin absorption
Mexico:	100 ppm TWA LMPEPPT; 60 mg/m3 TWA LMPEPPT
	150 ppm STEL [LMPECT]; 900 mg/m3 STEL [LMPECT]
	Skin potential for cutaneous absorption
MEDIUM BOILING HYDROCARBONS	68476-31-3
ACGIH:	100 mg/m3 TWA as total hydrocarbons inhalable fraction and vapor
	Skin potential - significant contribution to overall exposure by the cutaneous route

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.

Engineering Controls

Provide general ventilation needed to maintain concentration of vapor or mist below applicable 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. Where explosive mixtures may be present, equipment safe for such locations should be used.

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Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Safety glasses with side shields should be worn at a minimum. Additional protection like goggles, face shields, or respirators may be needed dependent upon anticipated use and concentrations of mists or vapors. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. Contact lens use is not recommended.

Skin Protection

Where skin contact is likely, wear chemical impervious gloves. To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

Respiratory Protection

No respiratory protection is normally required. Use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

Glove Recommendations

Wear appropriate chemical resistant gloves.

Protective Materials

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: Safety glasses. Gloves. Lab coat or apron.

Secuon 9 - PHYSICAL AND CHEMICAL PROPERTIES							
Appearance	Clear liquid.	Physical State	Not available				
Odor	Sweet glycol odor	Color	Clear				
Odor Threshold	Not available	рН	7.04				
Melting Point	-112 °F (-80°C) (DGME)	Boiling Point	374°F - 408°F (190-209°C)(DGME)				
Boiling Point Range	Not available	Freezing point	-112 °F (-80°C) (DGME)				
Evaporation Rate	Not available	Flammability (solid, gas)	Not available				
Autoignition Temperature	Not available	Flash Point	86°C (DGME)				
Lower Explosive Limit	1.1 (DGME)	Decomposition temperature	Not available				
Upper Explosive Limit	3% 200°C (DGME)	Vapor Pressure	0.3 mmHg@20°C (DGME)				
Vapor Density (air=1)	5.11 (DGME)	Specific Gravity (water=1)	0.954 at 72 °C				
Water Solubility	Soluble	Partition coefficient: n- octanol/water	Not available				
Viscosity	Not available	Solubility (Other)	Not available				
Density	Not available	Molecular Weight	Not available				

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Section 10 - STABILITY AND REACTIVITY

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition

Incompatible Materials

Oxidizing materials, combustible materials.

Hazardous decomposition products

Decomposition and combustion materials may be toxic. Burning may produce oxides of carbon.

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation

May cause respiratory irritation.

Skin Contact

May cause mild skin irritation. Repeated exposure may cause skin dryness or cracking.

Eye Contact May cause irritation.

Ingestion

Ingesting large amounts may cause liver and kidney injury.

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:

Dipropylene glycol methyl ether Oral LD50 Rat 5400 µL/kg Dermal LD50 Rabbit 9500 mg/kg

Immediate Effects

May cause irritation.

Delayed Effects

Repeated exposure may cause skin dryness or cracking, liver and kidney injury.

Irritation/Corrosivity Data

May cause irritation.

Respiratory Sensitization

No information available for the product.

Dermal Sensitization

No information available for the product.

Component Carcinogenicity

High Boiling Hyrdrocarbons	68746-31-3
ACGIH:	A3 – Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 45 [1989](overall evaluation upgraded from 3 to 2B with supporting evidence from other relevant data)(Group 2B(possibly carcinogenic to humans))
OSHA	Present

Germ Cell Mutagenicity No data available. Tumorigenic Data No data available Reproductive Toxicity No data available. Specific Target Organ Toxicity - Single Exposure No target organs identified. Specific Target Organ Toxicity - Repeated Exposure Liver and kidney. Aspiration hazard Not expected to be an aspiration hazard. Medical Conditions Aggravated by Exposure

Individuals with pre-existing respiratory tract (nose, throat, and lungs), central nervous system, kidneys, and eye and/or skin disorders may have increased susceptibility to the effects of exposure.

Section 12 - ECOLOGICAL INFORMATION

Component Analysis - Aquatic Toxicity

Dipropylene glycol methyl ether (34590-94-8) Fish LC50 96 h Pimephales promelas >10000 mg/L [static] Invertebrate LC50 48 h Daphnia magna 1919 mg/L IUCLID High Boiling Hyrdrocarbons LC50 96 h Pimephales promelas 35 mg/L [flow-through]

Persistence and Degradability

No information available for the product.

Bioaccumulative Potential

No information available for the product.

Mobility

No information available for the product.

Other Toxicity

No additional information is available.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. Contact Safety-Kleen regarding proper recycling or disposal.

Section 14 - TRANSPORT INFORMATION

US DOT Information: Shipping Name: COMBUSTIBLE LIQUIDS, N.O.S., (DIPROPYLENE GLYCOL METHYL ETHER) Hazard Class: 3 UN/NA #: UN1993 Packing Group: III

IATA Information: No Classification assigned. **IMDG Information:** No classification assigned. **TDG Information:** No classification assigned.

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

None of this products components are listed 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.

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

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

U.S. State Regulations

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

Component	CAS	CA	MA	MN	NJ	PA
Dipropylene glycol methyl ether	34590-94-8	Yes	Yes	Yes	Yes	Yes

Not listed under California Proposition 65.

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

Dipropylene glycol methyl ether			
	1 %		

WHMIS Classification

B3

Component Analysis - Inventory

Dipro	Dipropylene glycol metnyl etner (34590-94-8)									
US	CA	EU	AU	PH	JP	KR	CN	NZ		
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes		
High	High Boiling Hydrocarbons (68476-31-3)									

US	CA	EU	AU	PH	JP	KR	CN	NZ
Yes	DSL	EIN	Yes	No	No	No	No	Yes

Section 16 - OTHER INFORMATION

NFPA Ratings

Health: 2 Fire: 2 Reactivity: 0

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

Summary of Changes

New SDS: 6/23/2016

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; 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; EEC - European Economic Community; 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; JP - Japan; Kow - Octanol/water partition coefficient; KECI - Korea Existing Chemicals Inventory; KECL - Korea Existing Chemicals List; KR - Korea; 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; 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; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, 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; TSCA - Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

Other Information

Disclaimer:

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to the information or the product to which the information refers. The data contained on this sheet apply to the product as supplier to the user.