

SAFETY DATA SHEET

1. IDENTIFICATION

1.1 Product identifier

Product Name: Dipropylene Glycol Methyl Ether Acetate
Product Number(s): 40955-1
Synonyms: Propanol, (2-methoxymethylethoxy)-, acetate
CAS #: 88917-22-0

1.2 Recommended use of the chemical and restrictions on use

Uses: Solvent
Restrictions: No data available

1.3 Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Johann Haltermann, Ltd.
16717 Jacintoport Blvd.
Houston, TX 77015 USA
281-452-5951 Fax: 281-457-1127
sds@jhaltermann.com E-mail contact for SDS

1.4 Emergency telephone number

832-376-2026 24 HR Emergency Assistance
800-424-9300 24 HR CHEMTREC

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to 29 CFR §1910.1200 (d)

Flammable liquids (Category 4)
Skin irritation (Category 2)
Eye irritation (Category 2)
Specific target organ toxicity - single exposure (Category 3)

2.2 Label elements

Labeling according to 29 CFR §1910.1200 (f)

Symbol(s):



Signal word: **Warning**

Hazard statement(s):

Combustible liquid.

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

Precautionary statement(s):

Prevention:

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

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.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

In case of fire: Use carbon dioxide, foam, AFFF, or dry powder for extinction.

Storage:

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

Store locked up.

Disposal:

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

2.3 Other hazards None

3. COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

Chemical Name	CAS #	EINECS	Amount
Dipropylene Glycol Methyl Ether Acetate	88917-22-0	406-880-6	>98.0%

4. FIRST AID MEASURES**4.1 Description of first aid measures****General advice**

IF exposed or concerned: Get medical advice/attention.

Show this this safety data sheet to the doctor in attendance.

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If breathing is difficult, give oxygen. Refer for medical attention.

Skin Contact

IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.

If skin irritation occurs: Get medical advice/attention.

Eye Contact

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.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Do NOT induce vomiting.

If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Advice to Physician

No information available.

4.2 Most important symptoms and effects, both acute and delayed

Acute

May cause irritation to the eyes and skin.

Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing.

Delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing Media

In case of fire: Use carbon dioxide, foam, AFFF, or dry powder for extinction.

Use water spray to cool fire exposed containers.

Unsuitable Extinguishing Media

Water jet spray.

5.2 Special hazards arising from the substance or mixture

Produces oxides of carbon upon combustion.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.

5.4 Further information

The vapor is heavier than air, spreads along the ground and distant ignition is possible. Carbon monoxide may be evolved if incomplete combustion occurs.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Protective Measures

Evacuate danger area.

Isolate hazard area and deny entry to unnecessary or unprotected personnel. Stay upwind and keep out of low area. Remove all possible sources of ignition in the surrounding area.

Personal protection: self-contained breathing apparatus in large spill.

Ventilate contaminated area thoroughly shut off leaks if possible without personal risk.

Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding all equipment.

6.2 Environmental precautions

Do NOT wash away into sewer. Do NOT let this chemical enter the environment

Use appropriate containment of product and fire fighting water to avoid environmental contamination. Prevent from spreading or entering drains, ditches, or rivers by using sand, earth, or other appropriate barriers.

Notify authorities if any exposure to the general public or environment occurs or is likely to occur. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

For large spills (> 1 drum), transfer by mechanical means such as a vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste.

For small spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal.

Absorb remaining liquid in sand or inert absorbent and remove to safe place.

6.4 Reference to other sections

Refer to Section 8 for personal protection advice and Section 13 for disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Avoid breathing vapors or mists. Avoid contact with eyes or skin.

Use closed system, ventilation, explosion-proof electrical equipment and lighting. Prevent build-up of electrostatic charges (e.g., by grounding). Do NOT use compressed air for filling, discharging, or handling. Use non-sparking hand tools.

Wear protective gloves/protective clothing/eye protection/face protection.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

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

Store separated from strong oxidants. Reacts violently with strong oxidants causing fire and explosion hazard.

For storage use carbon steel, 304 stainless steel, or phenolic lined steel drums. Do not use aluminum, copper, galvanized iron, or galvanized steel.

Ensure that all local regulations regarding handling and storage facilities are followed.

7.2 Specific end use(s)

No data available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Permissible Exposure Limits

There are no established exposure limits for this product.

8.2 Exposure Controls

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures may include the following:

Use sealed systems as far as possible. Adequate explosion-proof ventilation to control airborne concentrations below the exposure limits. Local exhaust ventilation is recommended.

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

8.3 Personal Protective Equipment

Use personal protective equipment as required.

All personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers for more information.

Respiratory Protection

Use only with adequate ventilation. If engineering controls do not maintain airborne concentrations at a level which is adequate to protect worker health, an approved respirator should be used. Contact respirator supplier for specific recommendations.

For situations where high concentrations of vapors may be present, use an approved supplied air respirator operated in positive pressure mode.

Hand Protection

Where hand contact with this material may occur, use gloves that meet applicable standards.

Specific glove information is provided based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending upon the specific use conditions.

Contact glove manufacturer for advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves.

Eye Protection

Chemical splash goggles which meet the national standards should be used when handling this material.

Skin Protection

Chemical resistant suit including boots and gloves should be used when handling this material.

Specific Hygiene Measures

Do not eat, drink, or smoke when handling this material. Wash hands thoroughly after handling.

Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.

Monitoring Methods

Monitoring of the vapor concentrations of chemicals in the workplace may be required to confirm compliance with OEL and adequacy of exposure controls.

Sources for recommended air monitoring methods include:

USA: National Institute of Occupational Safety and Health (NIOSH): Manual of Analytical Methods, <http://www.cdc.gov/niosh/nmam/nmammenu.html>.

USA: Occupational Safety and Health Administration (OSHA): Sampling and Analytical Methods, <http://osha.gov/dts/sltc/methods/toc.html>.

Environmental Exposure Controls

Local guidelines for emissions limits for volatile substances must be observed for the discharge of exhaust air containing vapors.

See Sections 6, 7, 12, and 13 for more information on environmental exposure controls.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

(a) Appearance	Form:	Liquid	
	Color:	Colorless to yellow	
(b) Odor		Sweet	
(c) Odor threshold		No data available	
(d) pH		No data available	
(e) Melting/freezing point		-25	°C
(f) Initial boiling point and boiling range		209	°C
(g) Flash point		87.5	°C closed cup
(h) Evaporation rate		0.015	(n-Butyl acetate = 1)
(i) Flammability (solid, gas)		No data available	
(j) Upper/lower flammability or explosive limits		1.21 - 5.35	Volume % in air
(k) Vapor pressure		0.08	mm Hg at 20°C
(l) Vapor density		6.6	(Air = 1)
(m) Relative density		0.976	(Water = 1)
(n) Solubility (ies)		1.94 E5 mg/L	in water
(o) Partition coefficient: n-octanol/water		0.66	as Log Pow
(p) Auto-ignition temperature		340	°C
(q) Decomposition temperature		No data available	
(r) Viscosity		No data available	
(s) Explosive properties		No data available	
(t) Oxidizing properties		No data available	

9.2 Other information

Chemical formula	C9 H18 O4
Molecular weight	190.20

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical Stability

This material is stable under normal conditions of use.

Hazardous polymerization will not occur.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to Avoid

Heat, sparks, open flames, and other sources of ignition. Avoid the build up of static electricity.

10.5 Incompatible materials

Strong oxidizing agents and strong acids.

10.6 Hazardous Decomposition Products

In the event of fire, oxides of carbon, hydrocarbons, fumes, and smoke may be produced.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure

Likely routes of exposure include: inhalation, eye and skin contact, and ingestion.

11.2 Signs and symptoms of exposure

Eye irritation signs and symptoms may include a burning sensation, redness, and pain.

Skin irritation signs and symptoms may include dryness and redness.

Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing.

11.3 Delayed and immediate effects/Chronic effects from short- and long-term exposure

Eye

This material is not expected to cause serious/permanent eye damage but irritation may occur.

Skin

This material is not expected to be toxic through skin contact, but mild irritation may occur.

Inhalation

Inhalation of this material is not expected to be toxic, however, it may cause irritation to the respiratory tract and mucous membranes.

Ingestion

This material is not expected to be toxic through ingestion, but may cause mild gastrointestinal effects.

Chronic effects

No data available.

Subchronic effects

No data available.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Reproductive toxicity

No data available.

Specific target organ toxicity - single exposure

Respiratory System: Exposure to this material may affect the respiratory system.

Specific target organ toxicity - repeat exposure

No data available.

Aspiration hazard

No data available.

Potential health effects

Irritating to the respiratory system, eyes, and skin.

Target organ(s): Respiratory system. Eyes. Skin.

11.4 Acute Toxicity Estimates

Compound Name	CAS #	TEST - SPECIES - RESULT
DIPROPYLENE GLYCOL METHYL ETHER ACETATE	88917-22-0	Oral LD50 - Rat: >5000 mg/kg; Dermal LC50 - Rat: >2000 mg/kg; Inhalation LC50 - Rat: >5.7 mg/L/4 hr

11.5 Carcinogenicity

IARC (International Agency for Research on Cancer):

No component of this product present in concentrations of 0.1% or greater is identified by IARC to be a probable, possible, or confirmed carcinogen.

NTP (National Toxicology Program):

No component of this product present in concentrations of 0.1% or greater is identified by NTP to be a known or reasonably anticipated carcinogen.

OSHA (U.S. Occupational Health and Safety Administration):

No component of this product present in concentrations of 0.1% or greater is identified by OSHA to be a carcinogen or potential carcinogen.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

This material is not expected to be toxic to aquatic organisms.

Compound Name	CAS #	TEST-SPECIES-RESULTS
DIPROPYLENE GLYCOL METHYL ETHER ACETATE	88917-22-0	LC 50 - Daphnia Magna: 2701 mg/L/48 Hr; LC 50-Pimephales Promelas: 151 mg/L/96 Hr; EC 50 - Green algae: >1000 mg/L/96hours

12.2 Persistence and Degradability

This material is expected to biodegrade.

12.3 Bioaccumulative potential

This material is expected to have a low bioaccumulative potential as the Log Pow is less than 3.

12.4 Mobility in soil

This material is expected to be very mobile in soil.

12.4 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product disposal

Recover or recycle if possible.

It is the responsibility of the waste generator to determine the physical characteristics and toxicity of the material generated in order to properly designate the waste classification and disposal methods in compliance with applicable regulations.

Do not dispose into the environment, in drains, or allow to enter waterways. Waste product should not be allowed to contaminate soil or water.

Container disposal

Follow all SDS/label precautions even after container is emptied because they may retain product residues.

Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed.

Empty containers should be taken for recycling, recovery, or disposal through a suitable qualified or licensed contractor and in accordance with governmental regulations.

Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition as this may cause them to explode.

14. TRANSPORT INFORMATION

14.1 UN number	NA 1993
14.2 UN proper shipping name	Combustible liquid N.O.S. (contains Dipropylene Glycol Methyl Ether Acetate)
14.3 Transport hazard class(es)	Combustible
14.4 Packing group	III
14.5 Environmental hazards	Not listed in Appendix B to 49 CFR §172.101.
IMDG Marine pollutant:	No
14.6 Special precautions for the user	No data available.
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code	
MARPOL Category:	No data available.
IBC Code:	No data available.

15. REGULATORY INFORMATION

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

This safety datasheet complies with the requirements of 29 CFR §1910.1200

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA) or are exempt from reporting.

As defined under SARA 311 and 312, this product contains materials that are designated as having the following hazards: Acute Fire

FEDERAL REGULATORY LISTS:

Compound Name	CAS #	HAP ¹	SARA 313 ³	CERCLA RQ (lb) ⁴	RCRA Code ⁵	CAA 112(r) ²
DIPROPYLENE GLYCOL METHYL ETHER ACETATE	88917-22-0	N.L.	N.L.	N.L.	N.L.	N.L.

N.L. - Not listed on regulatory list

Clean Air Act - CAA

¹ HAP: Hazardous Air Pollutant under the Clean Air Act Section 112 (b) [42 U.S.C. 7401 et seq]

²CAA 112(r): Regulated Toxic Substances and Threshold Quantities for Accidental Release Prevention [40 CFR 68]

Superfund Amendments and Reauthorization Act - SARA Title III

SARA 311/312: Hazardous Chemical Reporting [40CFR 370.2]

³SARA 313: Toxic Chemical Release Reporting [40CFR 372.65]

Comprehensive Environmental Response, Compensation, and Liability Act - CERCLA

⁴Reportable Quantities - RQ [40 CFR 302]

⁵Resource Conservation and Recovery Act - RCRA Waste Codes [40 CFR 302]

CALIFORNIA REGULATIONS:

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

PENNSYLVANIA REGULATIONS:

To the best of our knowledge, this product does not contain any components cited on the Pennsylvania Special Hazardous Substances List, Pennsylvania Hazardous Substances List and/or the Pennsylvania Environmental Hazardous Substances List.

ADDITIONAL STATE REGULATIONS:

Components of this product are not found on the following state lists: DE, FL, MA, ME, MI, MN, NJ, NY, RI, WI.

15.2 Chemical safety assessment

No data available.

16. OTHER INFORMATION

Reason for Issue: This revision updates SDS formatting according to OSHA Hazard Communications Standard (HCS) promulgated on March 20, 2012 .

Approval date: May 19, 2014

Supersedes date: October 12, 2008

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END OF SDS
