Safety Data Sheet

According to Regulation (EC) No 1907/2006, Annex II,

Amended by COMMISSION REGULATION (EU) 2020/878,

Amended by COMMISSION DELEGATED REGULATION (EU) 2023/707,

According to REGULATION (EC) No 1272/2008

Dipropylene glycol dimethyl ether

Version 1.0

Issue date: 27-06-2023

Revision date: 27-06-2023 **SDS Record Number: CSSS-TCO-010-157189**

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Identification on the label/Trade name:	Dipropylene glycol dimethyl ether
Additional identification:	Nanoform is NOT covered by this SDS.
Identification of the product:	CAS# 111109-77-4; EC# 404-640-5
Index Number:	Not available
REACH registration No.:	01-0000015420-83-0007

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

1.2.1 Identified uses:

Formulation & (re)packing of substances and mixtures. Uses in Coatings. Use in Cleaning Agents. Use as a process solvent. Leather finishing (professional).

PC 3: Air care products

PC 4: Anti-freeze and de-icing products

PC 8: Biocidal products (e.g. disinfectants, pest control)

PC 9a: Coatings and paints, thinners, paint removes

PC 9b: Fillers, putties, plasters, modelling clay

PC 9c: Finger paints

PC 14: Metal surface treatment products

PC 18: Ink and toners

PC 23: Leather treatment products

PC 24: Lubricants, greases, release products

PC 28: Perfumes, fragrances

PC 30: Photo-chemicals

PC 31: Polishes and wax blends

PC 32: Polymer preparations and compounds

PC 35: Washing and cleaning products

PC 38: Welding and soldering products, flux products

1.2.2 Uses advised against:

Not available.

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative):	FURCHEM B.V. Vareseweg 63 3047 AT Rotterdam, The Netherlands Ph. +31 (0)10 200 48 14
Supplier(Manufacturer):	Anhui Lixing Chemical Co., Ltd
Address:	No.10, Zhongwang Road, Jixi County, Anhui Province, China
Contact person(E-mail):	gdq@lixingchem.com
Telephone:	+86-563-8152626

Fax: +86-563-8167310

1.4 Emergency telephone Number:

+86 563 8163717 Only available during office hours (9:00a.m.-17:30p.m.)

Available outside office hours? YES [ ] NO [X]

Section 2 Hazards identification

2.1 Classification of the substance or mixture:

2.1.1 Classification of the substance::

According to REGULATION (EC) No 1272/2008, based on available data, the classification criteria are not met:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard codes
Not classified	N/A

2.2 Label elements:

Hazard pictogram(s): No hazard pictogram is used.

Signal word: No signal word is used.

Hazard statement(s): Not applicable.

Precautionary statement(s): Not applicable.

Supplemental Hazard information (EU) Not applicable.

2.3 Other hazards:

The substance is not PBT / vPvB.

The substance is not identified as having endocrine disrupting properties.

Section 3 Composition/information on ingredients

Substance/Mixture: Substance

Ingredient(s):

Chemical Name	**Registration No.**	**CAS No.**	**EC No.**	**Concentration**	**Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)**
Dipropylene glycol dimethyl ether	01-0000015420-83-0007	111109-77-4	404-640-5	⩾99%	N/A

Section 4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Move person to fresh air; if effects occur, consult a physician.

4.1.2 In case of skin contact:

Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

4.1.3 In case of eyes contact:

Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

4.1.4 In case of ingestion:

If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

4.2 Most important symptoms and effects, both acute and delayed:

The product is not classified as harmful to human health effect.

4.3 Indication of any immediate medical attention and special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture: Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

5.3 Advice for firefighters: Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Isolate area. Keep unnecessary and unprotected personnel from entering the area. No smoking in area. Use appropriate safety equipment.

6.1.2 For emergency responders: Wear an appropriate NIOSH/MSHA approved respirator if vapor is generated.

6.2 Environmental precautions: Do not let large amount of product enter drains.

6.3 Methods and material for containment and cleaning up: Small spills: Absorb with materials such as: Sand. Vermiculite. Collect in suitable and properly labeled containers.

Large spills: Contain spilled material if possible. Pump into suitable and properly labeled containers.

6.4 Reference to other sections: See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

Section 7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures: Avoid contact with eyes. Wash thoroughly after handling. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or

perform similar operations on or near empty containers. Spills of these organic materials on hot fibrous insulations may lead to lowering of the auto ignition temperatures possibly resulting in spontaneous combustion. Keep away from heat, sparks and flame.

7.1.2 Advice on general occupational hygiene: Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities: Material should be stored in a clean, dry environment in original packaging and not exposed to ignition sources. Store in the following material(s): Carbon steel. Stainless steel. Phenol lined steel drums. Do not store in: Aluminum. Copper. Galvanized iron. Galvanized steel.

7.3 Specific end use(s): Not applicable.

Section 8 Exposure controls/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: Not available.

8.1.2 Additional exposure limits under the conditions of use: Not available.

8.1.3 DNEL/DMEL and PNEC-Values:

Workers - Hazard via inhalation route	Systemic effects-Long term exposure	DNEL=133 mg/m³
Workers - Hazard via dermal route	Systemic effects-Long term exposure	DNEL=22.1 mg/kg bw/day
General Population - Hazard via inhalation route	Systemic effects-Long term exposure	DNEL=15.8 mg/m³
General Population - Hazard via dermal route	Systemic effects-Long term exposure	DNEL=5.26 mg/kg bw/day
General Population - Hazard via oral route	Systemic effects-Long term exposure	DNEL=1.67 mg/kg bw/day
Hazard for aquatic organisms	Freshwater	PNEC=1 mg/L
Hazard for aquatic organisms	Marine water	PNEC=0.1 mg/L
Hazard for aquatic organisms	STP	PNEC=10 mg/L
Hazard for aquatic organisms	Sediment (freshwater)	PNEC=1.16 mg/kg sediment dw
Hazard for aquatic organisms	Sediment (marine water)	PNEC=1.16 mg/kg sediment dw
Hazard for terrestrial organisms	Soil	PNEC=0.1 mg/kg soil dw

8.2 Exposure controls:

8.2.1 Appropriate engineering controls: Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection: Use chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent.

Skin protection

Hand protection: Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended.

Body protection: Wear clean, body-covering clothing.

Respiratory protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure

	limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Organic vapor cartridge, type A (boiling point >65 ºC).
Thermal hazards:	Wear suitable protective clothing to prevent heat.
8.2.3 Environmental exposure controls:	Avoid discharge into the environment. According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical state:	Liquid
Colour:	Not available
Odour:	Ethereal
Odour threshold:	Not available
pH:	Not available
Melting point/freezing point (°C):	-71 °C
Boiling point or initial boiling point and boiling range (°C):	175 °C
Flash point (°C):	65 °C
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability (gas, liquid, solid):	Not available
Ignition temperature (°C):	Not available
Lower and upper explosion limit:	Not available
Vapour pressure (20°C):	0.54 mm Hg
Relative vapour density:	Not available
Relative Density (g/cm^3):	0.9 g/cm³ (20 °C)
Bulk density (kg/m^3):	Not available
Solubility in water (g/l, 20°C):	526 g/L (20 °C)
Solubility in other polar and non-polar solvents (g/l, 20°C):	Not available
Partition coefficient n-octanol/water (log Po/w, 20°C):	0.42 (20 °C)
Auto-ignition temperature:	165 °C
Decomposition temperature:	Not available
Kinematic viscosity (mm²/s):	1.23 mm^2/s (20 °C)
Particle characteristics:	Not available
Explosive properties:	Not available
Oxidising properties:	Not available
Molecular Formula:	C8H18O3
Molecular Weight:	162.23

9.2. Other information:

Fat solubility(solvent-oil to be specified) etc:	Not available

Surface tension:	64.3 mN/m (19.6 °C)
Dissociation constant in water(pKa):	Not available
Oxidation-reduction Potential:	Not available

Section 10 Stability and Reactivity

10.1 Reactivity:	The substance is stable under normal storage and handling conditions.
10.2 Chemical stability:	Stable at room temperature in closed containers under normal storage and handling conditions.
10.3 Possibility of hazardous reactions:	No dangerous reactions known.
10.4 Conditions to avoid:	Incompatible materials. Do not distill to dryness. Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.
10.5 Incompatible materials:	Strong acids. Strong bases. Strong oxidizers.
10.6 Hazardous decomposition products:	Decomposition products can include and are not limited to: Aldehydes. Ketones. Organic acids.

Section 11 Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:

Acute toxicity:	
LD50(Oral, Rat):	3329 mg/kg bw
LC50(Inhalation, Rat):	> 792 ppm 4h
LD50(Dermal, Rat):	> 2000 mg/kg bw
Skin corrosion/irritation:	Not classified
Serious eye damage/irritation:	Not classified
Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT- single exposure:	Not classified
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified

11.2 Information on other hazards

Endocrine disrupting properties:	The substance is not identified as having endocrine disrupting properties.
Other information:	Not applicable

Section 12 Ecological information

12.1 Toxicity:

Acute (short-term) toxicity:	
LC50(96h, Fish):	> 1000 mg/L
EC50(48h, Crustacea):	Not available
EC50(72h, Algae/aquatic plants):	4307 mg/L
Chronic (long-term) toxicity:	
NOEC(Fish):	> 300 mg/L
NOEC(Crustacea):	10 mg/L
NOEC(Algae/aquatic plants):	Not available
12.2 Persistence and degradability:	25% after 28 d.

12.3 Bioaccumulative potential: BCF: 4

12.4 Mobility in soil: log Koc: 1.38

12.5 Results of PBT and vPvB assessment: The substance is not PBT / vPvB.

12.6 Endocrine disrupting properties: The substance is not identified as having endocrine disrupting properties.

12.7 Other adverse effects: Not available.

12.8 Additional information Not available.

Section 13 Disposal considerations

13.1 Waste treatment methods: Any disposal practice must be in compliance with all local and national laws and regulations. Do not dump into any sewers, on the ground, or into any body of water.

Section 14 Transport Information

	Land transport (ADR/RID)	Inland waterways (ADN)	Sea transport (IMDG)	Air transport (ICAO/IATA)
14. 1 UN number or ID number	Not regulated	Not regulated	Not regulated	Not regulated
14.2 UN proper shipping name	Not regulated	Not regulated	Not regulated	Not regulated
14.3 Transport hazard class(es)	Not regulated	Not regulated	Not regulated	Not regulated
14.4 Packing group	Not regulated	Not regulated	Not regulated	Not regulated
14.5 Environmental hazards	No	No	No	No
14.6 Special precautions for user	See section 2.2	See section 2.2	See section 2.2	See section 2.2
14.7 Maritime transport in bulk according to IMO instruments	Not regulated	Not regulated	Not regulated	Not regulated

Section 15 Regulatory information

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

Relevant information regarding authorization: Not applicable.

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed.
For use only by technically qualified individuals.

Other National regulations: Not applicable

15.2 Chemical Safety Assessment YES [ ] NO [X]

Section 16 Other information

16.1 Indication of changes:

Version 1.0 Amended by (EU) 2020/878, (EU) 2023/707

16.2 Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: Code international maritime dangerous goods code

ICAO: International Civil Aviation Organization

IATA: International Air Transport Association

LC50: median lethal concentration

EC50: The effective concentration of substance that causes 50% of the maximum response.

NOEC: No Observed Effect Concentration

DNEL: derived no-effect level

PNEC: predicted no-effect concentration

16.3 Key literature references and sources for data

ECHA Registered substances data

16.4 Training instructions:

Not applicable.

16.5 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.6 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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