Propylene glycol

US Research Nanomaterials, Inc. **www.us-nano.com**

SAFTY DATA SHEET

Revised Date 7/11/2021

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name: Propylene glycol
Product Number : N/A
Propylene glycol CAS#: 57-55-6

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

Identified uses : Research, synthesis of nanomaterial dispersions

1.3 Details of the supplier of the safety data sheet

Company: **US Research Nanomaterials, Inc.**
3302 Twig Leaf Lane
Houston, TX 77084
USA
Telephone: +1 832-460-3661
Fax: +1 281-492-8628

1.4 Emergency telephone number

Emergency Phone # : (832) 359-7887

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms: Propylene glycol
1,2-Propanediol
Formula : C3H8O2
Molecular weight : 76.09 g/mol
CAS-No. : 57-55-6

EC-No. : 200-338-0

4. FIRST AID MEASURES

4.1 Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist or gas. For personal protection see section 8.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
For precautions see section 2.2..

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.
hygroscopic
Storage class (TRGS 510): 10: Combustible liquids

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Components with workplace control parameters

8.2 Exposure controls
Appropriate engineering controls
General industrial hygiene practice.
Personal protective equipment
Eye/face protection
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body Protection
Impervious clothing, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure
Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
a) Appearance: Form: liquid, clear, viscous
b) Odor: odorless
c) Odor Threshold: no data available
d) pH: No data available
e) Melting point/freezing point: Melting point/range: -60 °C (-76 °F) - lit.
f) Initial boiling point and boiling range: 187 °C 369 °F - lit.
g) Flash point: 103 °C (217 °F) - closed cup
h) Evaporation rate: no data available

i) Flammability (solid, gas): no data available
j) Upper/lower flammability or explosive limits: Upper explosion limit: 12.5 %(V)
Lower explosion limit: 2.6 %(V)
k) Vapor pressure: 0.11 hPa at 20 °C (68 °F)
l) Vapor density: 2.63 - (Air = 1.0)
m) Relative density: 1.036 g/cm3 at 25 °C (77 °F)
n) Water solubility: soluble
o) Partition coefficient - noctanol/water: log Pow: -0.8 at 25 °C (77 °F)
p) Auto-ignition temperature: No data available
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 safety information
No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity
no data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Strong oxidizing agents

10.6 Hazardous decomposition products
Other decomposition products - no data available
Hazardous decomposition products formed under fire conditions. - Carbon oxides
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity
Skin corrosion/irritation
Mild skin irritation
Serious eye damage/eye irritation
Causes serious eye irritation.
Respiratory or skin sensitization
No data available
Germ cell mutagenicity
No data available
Carcinogenicity

No data available
Reproductive toxicity
No data available
Aspiration hazard
No data available
Additional Information
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
no data available

12.2 Persistence and degradability
Readily biodegradable.

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
no data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects
no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.
Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

15. REGULATORY INFORMATION

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

16. OTHER INFORMATION

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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.