
Material Safety Data Sheet

Product Name	<u>Hexylene glycol</u>
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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identification:**Product Description:** Hexylene glycol**Synonyms:** 2-Methyl-2,4-pentanediol**CAS-No:** 107-41-5**EC-No.:** 203-489-0**Molecular Formula:** C₆ H₁₄ O₂**REACH Registration No:** A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration, or the registration is envisaged for a later registration deadline.**1.2. Relevant identified uses of the substance or mixture and uses advised against:****Recommended Use:** Laboratory chemicals, Manufacture of substances**1.3. Details of the supplier of the safety data sheet:**

- **Company** **Finar Limited**
184-186/P, Chacharwadi Vasna,
Sarkhej-Bavla Highway,
Ta.: Sanand, Dist.: Ahmedabad,
Email: info@finarchemicals.com
Web: www.finarchemicals.com
- **E-Mail Address** safety@finarchemicals.com; info@finarchemicals.com

1.4. Emergency Telephone Number:

- For Emergency contact on: +91 - 2717 - 616 717
- Registered office No: +91 - 79 - 40040085

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SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture:

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2. Label Elements:

Labelling (REGULATION (EC) No 1272/2008)

Hazard Pictogram



Signal Word: Warning

Hazards Statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements:

P302 + P352 IF ON SKIN: Wash with plenty of water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements: None

2.3. Other Hazards:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances: Hexylene glycol

3.2. Mixtures:

Component	CAS-No	EC-No.	Weight %
Hexylene glycol	107-41-5	203-489-0	≥99

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SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures:**

- **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

- **If Inhaled**

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

Consult a physician.

- **If case of skin contact**

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

- **In case of eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

- **If swallowed**

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

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

irritant effects, Headache, Cough, Dizziness, Convulsions, Shortness of breath, Unconsciousness

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

No information Available

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media:**

Suitable Extinguishing Media- Use water Spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media- For this substance/mixture no limitations of extinguishing agents are given.

5.2. Special hazards arising from the substance or mixture:

Combustible.

Vapours are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

Carbon Oxides.

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5.3. Advice for firefighters:

Special protective equipment for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further Information:

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2. Environmental precautions:

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up:

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent and neutralising material (e.g. Chemisorb®).

Dispose of properly. Clean up affected area.

6.4. Reference to other sections:

For disposal see Sections 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling:

Ensure adequate ventilation. Wear personal protective equipment/face protection. Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation.

7.2. Conditions for safe storage, including any incompatibilities:

Protect from moisture. Keep containers tightly closed in a dry and well-ventilated place.

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Keep away from heat, sparks and flame.

7.3. Specific end use(s):

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Contains no substances with occupational exposure limit values.

8.2. Exposure Controls:

- **Appropriate Engineering Controls:**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7.1.

Personal Protective Equipment:

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye & Face Protection

Safety goggles.

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. **Other protective equipment-**

Flame retardant antistatic protective clothing.

Respiratory Protection

required when vapours/aerosols are generated.

Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental Exposure Controls

Do not let product enter drains.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties:**

- **Appearance:** Colorless liquid
- **Odour:** Sweet
- **pH:** 6.0 – 8.0 at 118.2 g/l at 25 °C
- **Melting Point:** -40°C
- **Critical Temperature:** - No data available
- **Vapor Pressure:** 0.065 mbar at 20 °C
- **Vapor Density:** 4.1
- **Viscosity:** 36 mPa. s at 20 °C
- **Lower Explosive Limit:** 1.3 %(V)
- **Upper Explosive Limit:** 9 %(V)
- **Decomposition Temperature:** No data available
- **Partition coefficient: n-octanol/water:** log Pow: 0.58 - (Lit.). Bioaccumulation is not expected.
- **Volatility:** No data available
- **Bulk Density:** No data available
- **Odor Threshold:** No data available
- **Water/Oil Dist. Co eff.:** No data available
- **Ionicity (in Water):** No data available
- **Boiling Point/Range:** 197°C at 760 mmHg
- **Autoignition Temperature:** 306°C
- **Flash Point:** 93°C
- **Specific Gravity:** 0.922
- **Water Solubility:** No information available

9.2. Other information:**Molecular Formula:** C₆ H₁₄ O₂**Molecular Weight:** 118.18 g/mol

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SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity:**

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.2. Chemical stability:

The product is chemically stable under standard ambient conditions (room temperature). Hygroscopic.

10.3. Possibility of hazardous reactions:

Caution! In contact with nitrites, nitrates, nitrous acid possible liberation of nitrosamines!

Exothermic reaction with: Anhydrides, halogenating agents, Nitriles, Oxidizing agents, acids

A risk of explosion and/or of toxic gas formation exists with the following substances: Acid chlorides

10.4. Conditions to avoid:

Incompatible products. Exposure to moist air or water. Keep away from open flames, hot surfaces and sources of ignition.

10.5. Incompatible materials:

Acids, Strong oxidizing agents, Strong acids, Strong reducing agents, Acid anhydrides, Acid chlorides

10.6. Hazardous decomposition products:

Carbon monoxide (CO), Carbon dioxide (CO₂)

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects:****Acute Oral toxicity**

LD50 Oral - Rabbit - 3.200 mg/kg

Remarks: Behavioral: General anesthetic. Behavioral: Muscle weakness. Liver: Other changes. (RTECS)

Acute Inhalation toxicity

No data available

Acute Dermal toxicity

LD50 Dermal - Rabbit - 7.892 mg/kg

Remarks: (RTECS)

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Skin corrosion/irritation

Skin - Rabbit

Result: Irritating to skin - 4 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes serious eye irritation.

(OECD Test Guideline 405)

Respiratory or skin sensitization

Maximisation Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Genotoxicity in vitro

Chromosome aberration test in vitro

Chinese hamster ovary cells

Result: negative

In vitro mammalian cell gene mutation test

mouse lymphoma cells

Result: negative

Ames test

Escherichia coli/Salmonella typhimurium

Result: negative

Carcinogenicity

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.

Reproductive toxicity

No information available

Specific target organ toxicity - single exposure

No data available

Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath

Specific target organ toxicity - repeated exposure

No information available

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Aspiration hazard

No information available

11.2 Additional Information

Repeated dose toxicity - Rat - male and female - Oral - 13 Weeks - No observed adverse effect level – 450 mg/kg

RTECS: SA0810000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

After absorption:

Systemic effects:

Headache, Dizziness, Convulsions, Unconsciousness, drop in blood pressure, tachycardia

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: ECOLOGICAL INFORMATION**12.1. Toxicity:****Toxicity to fish:**

Flow-through test LC50 - Gambusia affinis (Mosquito fish) - 8.510 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates:

Static test EC50 - Daphnia magna (Water flea) - 5.410 mg/l - 48 h

(OECD Test Guideline 202)

Toxicity to algae:

Static test ErC50 - Pseudokirchneriella subcapitata (green algae) - >429 mg/l - 72 h

(OECD Test Guideline 201)

Static test NOEC - Pseudokirchneriella subcapitata (green algae) - 429 mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to Bacteria:

EC50 - Photobacterium phosphoreum - 3.070 mg/l - 5 min

Remarks: (IUCLID)

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12.2 Persistence and degradability:

Biodegradability: aerobic - Exposure time 28 d
Result: 81 % - Readily biodegradable.
(OECD Test Guideline 301F)

12.3 Bioaccumulate potential:

Partition coefficient: n-octanol/water
log Pow: 0.58
(calculated)
(Lit.) Bioaccumulation is not expected.

12.4 Mobility in soil:

No data available

12.5 Results of PBT and vPvB assessment:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects:

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

Waste material must be disposed of in accordance with the national and local regulations.
Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

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SECTION 14: Transport information

	Land transport (ADR/RID)	Air transport (IATA)	Sea transport (IMDG)
14.1 UN number	Not classified as dangerous in the meaning of transport regulations.		
14.2 Proper shipping name	Not classified as dangerous in the meaning of transport regulations.		
14.3 Class	Not classified as dangerous in the meaning of transport regulations.		
14.4 Packing group	Not classified as dangerous in the meaning of transport regulations.		
14.5 Environmentally hazardous	Not classified as dangerous in the meaning of transport regulations.		
14.6 Special precautions for user	Not classified as dangerous in the meaning of transport regulations.		

SECTION 15: Regulatory information

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

National legislation

Storage Class 10-13

15.2 Chemical safety assessment:

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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Training advice: -

Provide adequate information, instruction and training for operators.

Label Elements:

Hazard Pictograms



Signal Word: Warning

Hazards Statements:

H227 Combustible liquid.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements:

Response

P302 + P352 IF ON SKIN: Wash with plenty of water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P313 Get medical advice/ attention.

References: Not available

Created: 30/09/2020

Disclaimer:

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