1,6-HEXANEDIOL
CAS NO 629-11-8
MATERIAL SAFETY DATA SHEET
SDS/MSDS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers
Product name : 1,6-Hexanediol

CAS-No. : 629-11-8

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet
Company : Central Drug House (P) Ltd
7/28 Vardaan House
New Delhi -110002
INDIA

Telephone : +91 11 49404040
Email : care@cdhfinechemical.com

1.4 Emergency telephone number
Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements
Not a hazardous substance or mixture.

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
Synonyms : Hexamethylene glycol

Formula : \( \text{C}_6\text{H}_{14}\text{O}_2 \)
Molecular weight : 118.17 g/mol
CAS-No. : 629-11-8
EC-No. : 211-074-0

No components need to be disclosed according to the applicable regulations.
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.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

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

4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Avoid breathing dust.
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
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non Combustible Solids

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

8.2 Exposure controls

Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and
at the end of workday.

Personal protective equipment

Eye/face protection
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
Choose body protection in relation to its type, to the concentration and amount of dangerous
substances, and to the specific work-place., The type of protective equipment must be selected
according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Respiratory protection is not required. Where protection from nuisance ie (EN 143) dust masks.
Use respirators and components tested and approved under appropriate government standards
such as NIOSH (US) or CEN (EU).

Control of environmental exposure
No special environmental precautions required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance
   Form: flakes
   Colour: white

b) Odour
   No data available

c) Odour Threshold
   No data available

d) pH
   5.7 at 500 g/l at 20 °C

e) Melting point/freezing point
   Melting point/range: 38 - 42 °C - lit.

f) Initial boiling point and boiling range
   250 °C - lit.

g) Flash point
   102 °C - 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: 16 % (V)
   Lower explosion limit: 6.6 % (V)

k) Vapour pressure < 0.01 mbar at 20 °C

l) Vapour density No data available

m) Relative density 0.96 g/cm³ at 20 °C

n) Water solubility 1.000 g/l at 20 °C

o) Partition coefficient: n-octanol/water log Pow: 0 at 25 °C

p) Auto-ignition temperature 320 °C at 1,013 hPa Auto-flammability

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

Bulk density 0.53 g/l

SECTION 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
   Acid chlorides, Acid anhydrides, Oxidizing agents, Chloroformates, Reducing agents

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - Rat - 3,000 mg/kg(Hexane-1,6-diol) (OECD Test Guideline 401)
LC50 Inhalation - Rat - 8 h - 3.3 mg/l(Hexane-1,6-diol) (OECD Test Guideline 403)
LD50 Dermal - Rabbit - > 2,500 mg/kg(Hexane-1,6-diol) (OECD Test Guideline 402)

Skin corrosion/irritation
Skin - Rabbit(Hexane-1,6-diol)
Result: No skin irritation - 24 h (Draize Test)
**Serious eye damage/eye irritation**
Eyes - Rabbit(Hexane-1,6-diol)
Result: No eye irritation - 24 h
(Draize Test)

**Respiratory or skin sensitisation**
Maximisation Test - Guinea pig(Hexane-1,6-diol)
Did not cause sensitisation on laboratory animals.
(OECD Test Guideline 406)

**Germ cell mutagenicity**
No data available(Hexane-1,6-diol)

**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 data available(Hexane-1,6-diol)

**Specific target organ toxicity - single exposure**
No data available(Hexane-1,6-diol)

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available(Hexane-1,6-diol)

**Additional Information**
RTECS: MO2100000
Gastrointestinal disturbance, Nausea, Headache, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Hexane-1,6-diol)

**SECTION 12: Ecological information**

12.1 **Toxicity**

**Toxicity to fish**
mortality LC50 - Leuciscus idus (Golden orfe) - 4,640 - 10,000 mg/l - 96 h(Hexane-1,6-diol)
(DIN 38412)

**Toxicity to daphnia and other aquatic invertebrates**
Immobilization EC50 - Daphnia magna (Water flea) - > 500 mg/l - 48 h(Hexane-1,6-diol)

**Toxicity to algae**
Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 5,940 mg/l - 72 h(Hexane-1,6-diol)

**Toxicity to bacteria**
Growth inhibition IC50 - Pseudomonas putida - > 10,000 mg/l - 17 h(Hexane-1,6-diol)

12.2 **Persistence and degradability**

**Biodegradability**
aerobic - Exposure time 28 d(Hexane-1,6-diol)
Result: 95 % - Readily biodegradable
(OECD Test Guideline 301)

12.3 **Bioaccumulative potential**
No data available
Mobility in soil
No data available (Hexane-1,6-diol)

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.

Other adverse effects
No data available

SECTION 13: Disposal considerations

Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

UN number
ADR/RID: -   IMDG: -   IATA: -

UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

Transport hazard class(es)
ADR/RID: -   IMDG: -   IATA: -

Packaging group
ADR/RID: -   IMDG: -   IATA: -

Environmental hazards
ADR/RID: no   IMDG Marine pollutant: no   IATA: no

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical safety assessment
For this product a chemical safety assessment was not carried out

SECTION 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. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhnlinechemical.com for additional terms and conditions of sale.

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