

1,6-Hexanediol diacrylate

2025.03.01

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product name : 1,6-Hexanediol diacrylate

Product Number : /

Brand : /

CAS-No. : 13048-33-4

Product identifiers :

1.2 Details of the supplier of the safety data sheetCompany : YixingWencheng Chemical Co., Ltd.
CANGPU village, Yicheng street, Yixing City,
Jiangsu Province, China

Telephone : +86 0510 87501824

Fax : +86 0510 87501824

1.3 Emergency telephone

Emergency Phone # : +86 0510 87501824

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

Identified uses : For R&D and industry use. Not for pharmaceutical, household or other uses.

SECTION 2: Hazards identification**Summary of emergency**

colorless May be harmful in contact with skin, Causes skin irritation, May cause an allergic skin reaction, Causes serious eye irritation. Show this material safety data sheet to the doctor in attendance. After inhalation: fresh air. In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower, Consult a physician. After eye contact: rinse out with plenty of water, Call in ophthalmologist, Remove contact lenses. After swallowing: immediately make victim drink water (two glasses at most), Consult a physician. Combustible. Vapors 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.

2.1 GHS Classification

Acute toxicity, Dermal (Category 5), H313
Skin corrosion/irritation (Category 2), H315
Serious eye damage/eye irritation (Category 2A), H319
Skin sensitization (Category 1), H317

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

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Warning

Hazard statement(s)

H313

May be harmful in contact with skin.

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H319

Causes serious eye irritation.

Precautionary statement(s)

Prevention

P261

Avoid breathing mist or vapors.

P264

Wash skin thoroughly after handling.

P272

Contaminated work clothing should not be allowed out of the workplace.

P280

Wear protective gloves/ eye protection/ face protection.

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.

P312

Call a POISON CENTER/ doctor if you feel unwell.

P333 + P313

If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313

If eye irritation persists: Get medical advice/ attention.

Disposal

P501

Dispose of contents/ container to an approved waste disposal plant.

2.3 Physical and chemical hazards

Referring to current information, no physical or chemical hazard.

2.4 Health hazards

H313 May be harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.

2.5 Environmental hazards

Referring to current information, no environmental hazard.

2.6 Other hazards - none

SECTION 3: Composition/information on ingredients

Substance / Mixture : Substance

3.1 Substances

Synonyms : HDODA

Formula : C₁₂H₁₈O₄

Molecular weight : 226.27 g/mol

CAS-No. : 13048-33-4

EC-No. : 235-921-9

Index-No. : 607-109-00-8

Hazardous ingredients

Component	Classification	Concentration
Hexamethylene diacrylate	Acute toxicity Category 5; Skin corrosion/irritation Category 2; Serious eye damage/eye irritation Category 2A; Skin sensitization Category 1; H313, H315, H319, H317	≥ 90 %

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

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

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

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). 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

4.4 Notes to physician

No data available

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Water Foam Carbon dioxide (CO₂) Dry powder

Unsuitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Vapors 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.

5.3 Advice 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.

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 vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials 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 material (e.g. Chemisorb®).

Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 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

Storage conditions

Tightly closed.

Light sensitive.

Storage class

Storage class (TRGS 510): 10: Combustible liquids

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

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). Safety glasses

Skin protection

required

Body Protection

protective clothing

Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

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|---------------------------------|------------------------------------|
| a) Physical state | liquid |
| b) Color | colorless or yellowish |
| c) Odor | No data available |
| d) Melting point/freezing point | Melting point/freezing point: 5 °C |

e) Initial boiling point and boiling range	107 °C at 0.3 hPa
f) Flammability (solid, gas)	No data available
g) Upper/lower flammability or explosive limits	No data available
h) Flash point	113 °C - closed cup
i) Autoignition temperature	235 °C at 1,013.25 hPa
j) Decomposition temperature	No data available
k) pH	5-7
l) Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: 5-12 cps at 25 °C
m) Water solubility	0.36 g/l at 20 °C - slightly soluble
n) Partition coefficient: n-octanol/water	log Pow: 2.81 at 25 °C
o) Vapor pressure	< 0.01 hPa at 20 °C
p) Density	1.01 g/cm ³ at 25 °C - lit.
Relative density	No data available
q) Relative vapor density	No data available
r) Particle characteristics	No data available
s) Explosive properties	No data available
t) Oxidizing properties	none
u) Acid value	≤0.3 mgKOH/g

9.2 Other safety information

Relative vapor density	7.81 - (Air = 1.0)
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SECTION 10: Stability and reactivity

10.1 Chemical stability

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

10.2 Possibility of hazardous reactions

No data available

10.3 Conditions to avoid

Keep away from direct sunlight.
Strong heating.

10.4 Incompatible materials

Oxidizing agents Strong bases, Strong oxidizing agents, Peroxides, Copper, Iron oxides

10.5 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 5,000 mg/kg

LC0 Inhalation - Rat - male and female - 7 h - 0.41 mg/l

LD50 Dermal - Rabbit - 3,650 mg/kg

(OECD Test Guideline 402)

Skin corrosion/irritation

Skin - Rabbit

Result: Irritating to skin. - 4 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: May cause sensitization by skin contact.

(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Mouse

Test system: lymphocyte

Metabolic activation: with and without metabolic activation

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional Information

Repeated dose toxicity - Rat - male and female - Oral - NOAEL (No observed adverse effect level) - 250 mg/kg

RTECS: AT1430000

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information**12.1 Toxicity**

Toxicity to fish	static test LC50 - Leuciscus idus (Golden orfe) - 4.6 - 10 mg/l - 96 h (DIN 38412)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 2.6 mg/l - 48 h
Toxicity to algae	static test EC50 - Desmodesmus subspicatus (green algae) - 1.5 mg/l - 72 h
Toxicity to bacteria	Respiration inhibition EC50 - Sludge Treatment - ca. 270 mg/l - 30 min (OECD Test Guideline 209)

12.2 Persistence and degradability

Biodegradability	aerobic - Exposure time 28 d Result: 60 - 70 % - Readily biodegradable. (OECD Test Guideline 310)
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1 2.3 Bioaccumulative potential

No data available

1 2.4 Mobility in soil

No data available

1 2.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

SECTION 14: Transport information**14.1 UN number**

ADR/RID: 3082	IMDG: 3082	IATA-DGR: 3082
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14.2 UN proper shipping name

ADR/RID:	Not dangerous goods
IMDG:	Not dangerous goods
IATA-DGR:	Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: 9	IMDG: 9	IATA-DGR: 9
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1 4.4 Packaging group

ADR/RID: III	IMDG: III	IATA-DGR: III
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14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA-DGR: no

1 4.6 Special precautions for user**1 4.7 Incompatible materials**

Oxidizing agents Strong bases, Strong oxidizing agents, Peroxides, Copper, Iron oxides

Further information

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 regulatory information****Other regulations**

Please pay attention on the waste treatment should also comply with local regulations requirement.

SECTION 16: Other information**Full text of H-Statements referred to under sections 2 and 3.**

H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

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.