



SAFETY DATA SHEET according
to GB/T 16483 and GB/T 17519

Version 8.0
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SDS No. WENCHENG- 246794
Product Number WENCHENG- 246794

Pentaerythritol triacrylate

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

1.1 Product identifiers

Product name : Pentaerythritol triacrylate

Product Number : 246794
Brand : WENCHENG

1.2 Details of the supplier of the safety data sheet

Company : YIXING WENCHENG CHEMICAL CO.,LTD
CANGPU VILLAGE YICHENG STREET
YIXING CITY
JIANGSU
204200 YIXING
CHINA

宜兴市文成化工有限公司
江苏省宜兴市宜城街道沧浦村
邮政编码：204200

Telephone +86 510 87501824
Fax +86 510 87501824

1.3 Emergency telephone

Emergency Phone # : +86 510 87501824
(CHEMTREC)

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

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



SECTION 2: Hazards identification

Summary of emergency

yellow Causes skin irritation., May cause an allergic skin reaction., Causes serious eye irritation., Suspected of causing cancer., Very toxic to aquatic life with long lasting effects. Show this material safety data sheet to the doctor in attendance. After inhalation: fresh air. Call in physician. 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

Skin corrosion/irritation (Category 2), H315
Serious eye damage/eye irritation (Category 2A), H319
Skin sensitization (Category 1), H317
Carcinogenicity (Category 2), H351
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 1), H410

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)

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing mist or vapors.
P264	Wash skin thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ 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.



P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P337 + P313 If eye irritation persists: Get medical advice/ attention.
 P391 Collect spillage.

Storage
 P405 Store locked up.

Disposal
 P501 Dispose of contents/ container to an approved waste disposal plant.

Reduced Labeling (<= 125 ml)

Pictogram



Signal Word

Warning

Hazard statement(s)

H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H351 Suspected of causing cancer.
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

none

2.3 Physical and chemical hazards

Referring to current information, no physical or chemical hazard.

2.4 Health hazards

H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.
 H351 Suspected of causing cancer.

2.5 Environmental hazards

H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.

2.6 Other hazards - none

SECTION 3: Composition/information on ingredients

Substance / Mixture : Mixture

3.2 Mixtures

Synonyms : Pentaerythritol tetraacrylate, Pentaerythritol triacrylate, and Trimethylolpropane triacrylate mixture

Hazardous ingredients

Component	Classification	Concentration
Pentaerythritol tetraacrylate		
CAS-No. 4986-89-4	Skin corrosion/irritation Category 2; Serious eye	>= 9.5 %
EC-No. 225-644-1		



Index-No.	607-122-00-9	damage/eye irritation Category 2A; Skin sensitization Category 1; H315, H319, H317	
pentaerythritol triacrylate			
CAS-No.	3524-68-3	Acute toxicity Category 4; Acute toxicity Category 5; Skin corrosion/irritation Category 2; Serious eye damage/eye irritation Category 2A; Skin sensitization Category 1; H302, H313, H315, H319, H317	>= 20 - < 30 %
EC-No.	222-540-8		
Index-No.	607-110-00-3		
Trimethylolpropane triacrylate			
CAS-No.	15625-89-5	Skin corrosion/irritation Category 2; Serious eye damage/eye irritation Category 2A; Skin sensitization Category 1; Carcinogenicity Category 2; Short-term (acute) aquatic hazard Category 1; Long-term (chronic) aquatic hazard Category 1; H315, H319, H317, H351, H400, H410	>= 25 - < 30 %
EC-No.	239-701-3		
Index-No.	607-111-00-9		

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. Call in physician.

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

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.



Hygiene measures

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

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities**Storage conditions**

Tightly closed.

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**

- | | |
|---------------------------------|-------------------|
| a) Physical state | liquid |
| b) Color | yellow |
| c) Odor | No data available |
| d) Melting point/freezing point | No data available |



e) Initial boiling point and boiling range	No data available
f) Flammability (solid, gas)	No data available
g) Upper/lower flammability or explosive limits	No data available
h) Flash point	110 °C - closed cup
i) Autoignition temperature	No data available
j) Decomposition temperature	No data available
k) pH	No data available
l) Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
m) Water solubility	No data available
n) Partition coefficient: n-octanol/water	No data available
o) Vapor pressure	No data available
p) Density	1.18 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

9.2 Other safety information

No data available

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

May polymerize on exposure to light.
Strong heating.

10.4 Incompatible materials

Strong acids, Strong oxidizing agents



10.5 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

Acute toxicity

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: Mixture causes skin irritation.

Serious eye damage/eye irritation

Remarks: Mixture causes serious eye irritation.

Respiratory or skin sensitization

Mixture may cause an allergic skin reaction.

Germ cell mutagenicity

No data available

Carcinogenicity

Evidence of a carcinogenic effect.

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

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Other dangerous properties can not be excluded.

This substance should be handled with particular care.

Handle in accordance with good industrial hygiene and safety practice.

Components

Pentaerythritol tetraacrylate

Acute toxicity

Oral: No data available



Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

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

pentaerythritol triacrylate

Acute toxicity

LD50 Oral - Rat - 1,830 mg/kg

Remarks: Gastrointestinal:Ulceration or bleeding from large intestine.

Gastrointestinal:Ulceration or bleeding from small intestine.

Gastrointestinal:Other changes.

Inhalation: No data available

LD50 Dermal - Rabbit - 4,668 mg/kg

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Mouse

Test system: lymphocyte

Remarks: Micronucleus test

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

Trimethylolpropane triacrylate**Acute toxicity**

LD50 Oral - Rat - > 5,000 mg/kg

Remarks: (RTECS)

Inhalation: No data available

LD50 Dermal - Rabbit - 5,170 mg/kg

Remarks: (ECHA)

Skin corrosion/irritation

Skin - Rabbit

Result: slight irritation - 24 h

(OECD Test Guideline 404)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Moderate eye irritation

Remarks: (ECHA)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization

Patch test: - Humans

Result: May cause sensitization by skin contact.

Remarks: (ECHA)

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Germ cell mutagenicity

In vivo tests did not show mutagenic effects

Test Type: Chromosome aberration test in vitro

Test system: lymphocyte

Result: positive

Method: OECD Test Guideline 474

Species: Mouse - male and female - Bone marrow

Result: negative

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available



Specific target organ toxicity - repeated exposure

Aspiration hazard

No data available

SECTION 12: Ecological information

12.1 Toxicity

Mixture

No data available

12.2 Persistence and degradability

No data available

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 Endocrine disrupting properties

No data available

12.7 Other adverse effects

No data available

Components

Pentaerythritol tetraacrylate

No data available

pentaerythritol triacrylate

No data available

Trimethylolpropane triacrylate

Toxicity to fish	semi-static test LC50 - Danio rerio (zebra fish) - 0.87 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 19.9 mg/l - 48 h (Regulation (EC) No. 440/2008, Annex, C.2)
Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - 4.86 mg/l - 96 h (Regulation (EC) No. 440/2008, Annex, C.3)



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

14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Trimethylolpropane triacrylate)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Trimethylolpropane triacrylate)

IATA-DGR: Environmentally hazardous substance, liquid, n.o.s. (Trimethylolpropane triacrylate)

14.3 Transport hazard class(es)

ADR/RID: 9

IMDG: 9

IATA-DGR: 9

14.4 Packaging group

ADR/RID: III

IMDG: III

IATA-DGR: III

14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: yes

IATA-DGR: yes

14.6 Special precautions for user

14.7 Incompatible materials

Strong acids, Strong oxidizing agents

Further information

Packages smaller than or equal to 5 kg / L , not dangerous goods of Class 9

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.

H302

Harmful if swallowed.

H313

May be harmful in contact with skin.



H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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