Chemical Safety Data Sheet MSDS / SDS

Triethyl orthopropionate

Revision Date: 2025-09-27 Revision Number: 1

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

Product identifier Product name : Triethyl orthopropionate CBnumber : CB9115954 CAS : 115-80-0 **EINECS Number** : 204-108-0 : TRIETHYL ORTHOPROPIONATE,1,1,1-triethoxypropane Synonyms Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses : For R&D use only. Not for medicinal, household or other use. Uses advised against : none **Company Identification** : Chemicalbook Company Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing Telephone : 010-86108875

SECTION 2: Hazards identification

GHS Label elements, including precautionary statements Symbol(GHS) Signal word Warning

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

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

Continuerinsing.

P370+P378 In case of fire: Use ... for extinction.

P405 Store locked up.

Hazard statements

H226 Flammable liquid and vapour

H315 Causes skin irritation

SECTION 3: Composition/information on ingredients

Substance

Product name : Triethyl orthopropionate

Synonyms : TRIETHYL ORTHOPROPIONATE,1,1,1-triethoxypropane

CAS : 115-80-0
EC number : 204-108-0
MF : C9H20O3
MW : 176.25

SECTION 4: First aid measures

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

Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

Special hazards arising from the substance or mixture

Carbon oxides

Advice for firefighters

No data available

Further information

No data available

HEALTH 2

NFPA 704

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Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury (e.g. <u>diethyl</u>

ether, ammonium phosphate, iodine)

			Must be moderately heated or exposed to relatively high ambient temperature before ignition can occur and multiple finely
	FIRE	2	divided suspended solids that do not require heating before ignition can occur. Flash point between 37.8 and 93.3 $^{\circ}$ C (100 $^{\circ}$ C)
			and 200 °F). (e.g. diesel fuel, <u>sulfur</u>)
	REACT	1	Normally stable, but can become unstable at elevated temperatures and pressures (e.g. <u>propene</u>)
	SPEC.		
	HAZ.		
	•····		

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For personal protection see section 8.

Environmental precautions

No data available

Methods and materials for containment and cleaning up

No data available

Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling

For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Exposure to moisture

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

control parameter

Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

Exposure controls

Personal protective equipment

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.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Splash contact

Material: butyl-rubber

Minimum layer thickness: 0,3 mm Break through time: 60 min Material tested:Butoject? (KCL 897 / Aldrich Z677647, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Control of environmental exposure

Prevent product from entering drains.

SECTION 9: Physical and chemical properties

Information on basic physicochemical properties

Appearance	dark yellow liquid
Odour	No data available
Odour Threshold	No data available
рН	No data available
Melting point/freezing point	284 °C
Initial boiling point and boiling range	155 - 160 °C
Flash point	60 °C - closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive	No data available
limits	
Vapour pressure	No data available
Vapour density	No data available
Relative density	0,876 g/mL at 25 °C
Water solubility	No data available
	. 10 3313 3 3 3 3 3 3
Partition coefficient: n-octanol/water	log Pow: 1,97
Partition coefficient: n-octanol/water Autoignition temperature	
	log Pow: 1,97
Autoignition temperature	log Pow: 1,97 No data available
Autoignition temperature Decomposition temperature	log Pow: 1,97 No data available No data available
Autoignition temperature Decomposition temperature Viscosity	log Pow: 1,97 No data available No data available No data available

Other safety information

SECTION 10: Stability and reactivity

Reactivity

No data available

Chemical stability

No data available

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

acids, Strong oxidizing agents

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

Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

Skin - Rabbit

Result: Skin irritation

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Moderate eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

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

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

SECTION 12: Ecological information

Toxicity

No data available

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 177 mg/l - 48 h

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

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

No data available

SECTION 14: Transport information

UN number

ADR/RID: 3272 IMDG: 3272 IATA: 3272

UN proper shipping name

ADR/RID: ESTERS, N.O.S. (Triethyl orthopropionate) IMDG: ESTERS, N.O.S. (Triethyl orthopropionate) IATA: Esters, n.o.s.

(Triethyl orthopropionate)

14.3

Transport hazard class(es)

ADR/RID: 3 IMDG: 3

IATA:

3

Packaging group

ADR/RID: III IMDG: III

IATA:

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1.

Environmental hazards

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

Special precautions for user

No data available

SECTION 15: Regulatory information

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

Regulations on the Safety Management of Hazardous Chemicals

China Catalog of Hazardous chemicals 2015:Listed. website: https://www.mem.gov.cn/

Measures for Environmental Management of New Chemical Substances

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Listed. website: https://emb.gov.ph/

 $New\ Zealand\ Inventory\ of\ Chemicals\ (NZloC): Listed.\ website:\ https://www.epa.govt.nz/discounting and the control of\ Chemicals\ (NZloC): Listed.\ website:\ https://www.epa.govt.nz/discounting and the control of\ Chemicals\ (NZloC): Listed.\ website:\ https://www.epa.govt.nz/discounting and the control of\ Chemicals\ (NZloC): Listed.\ website:\ https://www.epa.govt.nz/discounting and the control of\ Chemicals\ (NZloC): Listed.\ website:\ https://www.epa.govt.nz/discounting and\ https://www.epa.govt.nz/discounting an$

European Inventory of Existing Commercial Chemical Substances (EINECS):Listed. website: https://echa.europa.eu/

United States Toxic Substances Control Act (TSCA) Inventory:Listed. website: https://www.epa.gov/

Vietnam National Chemical Inventory:Listed. website: https://chemicaldata.gov.vn/

EC Inventory:Listed.

Korea Existing Chemicals List (KECL):Listed. website: http://ncis.nier.go.kr

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Listed. website: https://www.mee.gov.cn/

SECTION 16: Other information

Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

References

- [1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- [2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- [3] ECHA European Chemicals Agency, website: https://echa.europa.eu/
- [4] eChemPortal The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

- [5] ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- [6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- [7] HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- [8] IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- [9] IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- 【10】 Sigma-Aldrich, website: https://www.sigmaaldrich.com/

Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.