

# **SAFETY DATA SHEET**

According to 1907/2006/EC, Article 31

Revision number: 1 Revision date: 10/03/2018

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

1.1 Product identifiers

**Product name:** 2,2,4-Trimethylpentane

Product code: T0481

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

Identified uses: Reagents.

1.3 Details of the supplier of the safety data sheet

Supplier:

TCI EUROPE N.V. Boerenveldseweg 6 Haven 1063 B-2070 Zwijndrecht

Telephone: +32(0)3 735 07 00 E-mail: sales-eu@tcichemicals.com

**1.4 Emergency telephone number:** +32(0)70 245 245

#### SECTION 2: Hazards identification

# 2.1 Classification of the substance or mixture

Flammable liquids
Category 2
Skin corrosion/irritation
Category 2
Specific target organ toxicity - Single exposure [Category 3]
Acute aquatic hazard
Category 1
Long-term aquatic hazard
Category 1
Category 1
Category 1

#### 2.2 Label elements

Pictograms or hazard symbols







Signal word Danger

**Hazard statements** H225-Highly flammable liquid and vapour.

H315-Causes skin irritation.

H336-May cause drowsiness or dizziness.

H304-May be fatal if swallowed and enters airways.

H400-Very toxic to aquatic life.

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

P261-Avoid breathing mist, vapours or spray. P280-Wear protective gloves, eye protection.

P301+P310+P331-IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce

vomiting.

P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs:

Get medical advice or attention. Take off contaminated clothing and wash it before reuse.

P304+P312-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a

POISON CENTER or doctor if you feel unwell.

P370+P378-In case of fire: Use dry chemical or dry sand to extinguish.

2.3 Other hazards

Results of PBT and vPvB assessment

**Precautionary statements** 

PBT: Not applicable vPvB: Not applicable

# SECTION 3: Composition/information on ingredients

3.1 Substances

**Components:** 2,2,4-Trimethylpentane

 Percent:
 >99.0%(GC)

 CAS RN:
 540-84-1

 EC-No:
 208-759-1

 Synonyms:
 Isooctane

 Chemical Formula:
 C<sub>8</sub>H<sub>18</sub>

# SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON

CENTER or doctor/physician if you feel unwell.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If

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

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. If eye irritation persists: Get medical advice/attention.

Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

Protection of first-aiders: A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

#### 4.2 Most important symptoms and effects, both acute and delayed

No data available

#### 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: Dry chemical, foam, carbon dioxide.
Unsuitable extinguishing media: Water (It may scatter and spread fire.)

5.2 Special hazards arising from the

substance or mixture

Carbon dioxide, Carbon monoxide

5.3 Advice for firefighters

Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Keep containers cool by spraying with water. Eliminate all ignition sources if safe to do so. When extinguishing fire, be sure to wear personal protective equipment

### SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc

6.2 Environmental precautions

Be careful not to let it flow into rivers, etc., since adverse effects on the environment are concerned

6.3 Methods and materials for containment and cleaning up

Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.

**6.4 Reference to other sections** For disposal see section 13.

# SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid contact with skin, eyes and clothing.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store locked up. Store away from incompatible materials such as oxidizing agents.

7.3 Specific end use(s) No further relevant information available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters No data available

8.2 Exposure controls Install a closed system or local exhaust. Also install safety shower and eye bath.

Respiratory protection: Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc.

Use respirators approved under appropriate government standards and follow local and national

regulations.

Hand protection: Impervious gloves.

**Eye protection:** Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

## SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state (20°C):

Form:

Colour:

Colour:

Colour:

No data available

Odour threshold: 48 ppm

pH: No data availableMelting point/freezing point: No data available

Boiling point/range: 99°C
Flash point: -9°C

Evaporation rate(Butyl Acetate=1): No data available Flammability(solid, gas): No data available

Flammability or explosive limits:

 Lower:
 1.1%

 Upper:
 6%

 Vapour pressure:
 5.4kPa/21°C

 Vapour density:
 3.93

Relative density: Solubility(ies):

[Water] Insoluble

[Other solvents]

Miscible: Acetone, Heptane

**Soluble:** Ether, Benzene, Chloroform, Toluene, Xylene

0.69

Partition coefficient: No data available

n-octanol/water:

Autoignition temperature: 418°C

Decomposition temperature:No data availableDynamic Viscosity:No data availableKinematic viscosity:No data available

**9.2 Other safety information** No data available

# SECTION 10: Stability and reactivity

**10.1 Reactivity**No data available

**10.2 Chemical stability** Stable under proper conditions.

**10.3 Possibility of hazardous reactions** No special reactivity has been reported.

**10.4 Conditions to avoid** Spark, Open flame, Static discharge

10.5 Incompatible materials Oxidizing agents

10.6 Hazardous decomposition products Carbon dioxide, Carbon monoxide

# SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute Toxicity:

Skin corrosion/irritation:

Serious eye damage/irritation:

Respiratory or skin sensitization:

Germ cell mutagenicity:

No data available
No data available
No data available
dns-mus-orl 500 mg/kg
dns-rat-orl 500 mg/kg

Carcinogenicity:

IARC = No data available
NTP = No data available
Reproductive toxicity: No data available
STOT-single exposure: No data available
STOT-repeated exposure: No data available
Aspiration hazard: No data available
RTECS Number: SA3320000

# SECTION 12: Ecological information

12.1 Toxicity

Fish: 96h LC50:0.561 mg/L (Oryzias latipes)

Crustacea: No data available
Algae: No data available

12.2 Persistence and degradability 0 % (by BOD), 3 % (by GC)

12.3 Bioaccumulative potential 540 (conc. 10 ug/L) , 520 (conc. 1 ug/L)

12.4 Mobility in soil

Log Pow: No data available
Soil adsorption (Koc): No data available
Henry's Law (PaM ³/mol): No data available

12.5 Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

**12.6 Other adverse effects**No data available

# SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system but exert extra care in igniting as this material is highly flammable. Observe all federal, state and local regulations when disposing of the substance

# SECTION 14: Transport information

**14.1 UN number** 1262

14.2 UN proper shipping name

ADR/RID Octanes
IMDG/IMO Octanes
ICAO/IATA Octanes

14.3 Transport hazard class(es)

ADR/RID 3: Flammable liquid IMDG/IMO 3: Flammable liquid ICAO/IATA 3: Flammable liquid

14.4 Packaging group

ADR/RID || IMDG/IMO || ICAO/IATA || I

14.5 Environmental hazards

Marine pollutant Y

14.6 Special precautions for user No data available

### SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Water Hazard Classes (WGK):

Substance of Very High Concern (SVHC) according to the

Class 2 - Hazard to waters Not listed

REACH Regulations (EC) No.1907/2006

A chemical safety assessment has not been carried out.

# SECTION 16: Other information

15.2 Chemical safety assessment

Prepared by: TCI EUROPE N.V. Issue date: 10/03/2018

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

**End of Safety Data Sheet**