

# 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

(S)-(-)-Tetrahydrofuran-2-carboxylic Acid Product name:

T1741 Product code:

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

Corrosive to metals Category 1 Skin corrosion/irritation Category 1C Serious eye damage/eye irritation Category 1

#### 2.2 Label elements

Pictograms or hazard symbols



Signal word Danger

H290-May be corrosive to metals. **Hazard statements** 

H314-Causes severe skin burns and eye damage.

**Precautionary statements** P260-Do not breathe dusts or mists.

P280-Wear protective gloves, protective clothing, face protection.

P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a

POISON CENTER or doctor.

P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.

P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a POISON CENTER or doctor.

P305+P351+P338+P310-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

2.3 Other hazards

Results of PBT and vPvB assessment

Not applicable PBT: Not applicable vPvB:

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## SECTION 3: Composition/information on ingredients

3.1 Substances

Components: (S)-(-)-Tetrahydrofuran-2-carboxylic Acid

**Percent:** >98.0%(GC)(T) **CAS RN:** 87392-07-2

Synonyms: (S)-(-)-2-Tetrahydrofuroic Acid

Chemical Formula: C5H8O3

## 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. Immediately call a

POISON CENTER or doctor/physician.

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

Immediately call a POISON CENTER or doctor/physician.

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

Continue rinsing.Immediately call a POISON CENTER or doctor/physician.

Ingestion: 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, water spray, carbon dioxide.

Unsuitable extinguishing media: Solid streams of water

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: Remove movable containers 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 personal protective equipment. 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** Prevent product from entering drains

6.3 Methods and materials for containment and cleaning up

Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). 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.

**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. 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. Use corrosive resistant equipment.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool and dark 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.

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

#### SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state (20°C): Liquid Form: Clear

Colour: Colorless - Pale yellow Odour: No data available No data available pH: Melting point/freezing point: No data available

251°C Boiling point/range: Flash point: 139°C

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

Flammability or explosive limits:

Lower: No data available Upper: No data available Vapour pressure: No data available. Vapour density: No data available

Relative density: 1.21

Solubility(ies):

[Water] No data available No data available [Other solvents] No data available Partition coefficient:

n-octanol/water:

No data available No data available

Autoignition temperature: Decomposition temperature: **Dynamic Viscosity:** No data available No data available Kinematic viscosity:

No data available 9.2 Other safety information

# SECTION 10: Stability and reactivity

10.1 Reactivity No data available

Stable under proper conditions. 10.2 Chemical stability

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

10.4 Conditions to avoid No data available

10.5 Incompatible materials Oxidizing agents, Bases

10.6 Hazardous decomposition products Carbon dioxide, Carbon monoxide

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## 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

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

## SECTION 12: Ecological information

## 12.1 Toxicity

Fish: No data available
Crustacea: No data available
Algae: No data available

12.2 Persistence and degradability No data available

**12.3 Bioaccumulative potential**No data available

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. Observe all federal, state and local regulations when disposing of the substance.

# SECTION 14: Transport information

**14.1 UN number** 3265

14.2 UN proper shipping name

ADR/RID Corrosive liquid, acidic, organic, n.o.s IMDG/IMO Corrosive liquid, acidic, organic, n.o.s ICAO/IATA Corrosive liquid, acidic, organic, n.o.s

14.3 Transport hazard class(es)

ADR/RID 8: Corrosive
IMDG/IMO 8: Corrosive
ICAO/IATA 8: Corrosive

14.4 Packaging group

ADR/RID III
IMDG/IMO III
ICAO/IATA III

14.5 Environmental hazards

Marine pollutant -

**14.6 Special precautions for user**No data available

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## SECTION 15: Regulatory information

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

Substance of Very High Concern (SVHC) according to the Not listed

REACH Regulations (EC) No.1907/2006

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

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**