

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 01 Apr 2025

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product name:

Tioxazafen

1.1. Catalog No.:

684302

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical
uses: R&D

1.3. Uses advised against:

HPC Standards GmbH
Am Wieseneck 7

04451 Cunnersdorf
Deutschland

Tel. +49 34291 3372-36
Fax. +49 34291 3372-39
contact@hpc-standards.com

1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36
This number is only available during office hours.

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
Regulation (EC) No 1272/2008
Skin corrosion/irritation Category 2 - (H315)
Carcinogenicity Category 2 - (H351)
Acute aquatic toxicity Category 1 - (H400)
Chronic aquatic toxicity Category 1 - (H410)

2.2. Label elements

2.2.1. Pictogram



2.2.2.

Signal word
Warning
Hazard statements

H315 - Causes skin irritation
H351 - Suspected of causing cancer
H410 - Very toxic to aquatic life with long lasting effects
Precautionary Statements - EU (§28, 1272/2008)
P201 - Obtain special instructions before use
P264 - Wash face, hands and any exposed skin thoroughly after handling
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P391 - Collect spillage
2.3. Other hazards
No information available.
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.
This product does not contain any known or suspected endocrine disruptors.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name: Tioxazafen
CAS: 330459-31-9
Classification according
to Regulation (EC) No.
1272/2008 [CLP]
Skin Irrit. 2 (H315)
Carc. 2 (H351)
Aquatic Acute 1
(H400)
Aquatic Chronic 1
(H410)
EC No (EU
Index No)
810-533-8
This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No.
1907/2006 (REACH), Article 59)

3.1.1. Formula

C₁₂H₈N₂O₅

3.1.2. Molecular Weight (g/mol)

228.27

3.1.3. CAS-No.

330459-31-9

4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

Symptoms No information available.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

General hygiene considerations Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Please refer to the manufacturers certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA.

7.3. Specific end use(s)

Risk Management Methods: The information required is contained in this Safety Data Sheet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration

(PNEC)

No information available.

8.2. Exposure controls

Personal protective equipment

Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves. Impervious gloves. The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374.

Skin and body protection Long sleeved clothing. Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Solid

Appearance Solid

Color white

Odor No information available.
Odor threshold No information available
Property Values
Melting point / freezing point 108.6 °C
Initial boiling point and boiling range No data available
Flammability No data available
Flammability Limit in Air
Upper flammability or explosive limits
No data available
Lower flammability or explosive limits
No data available
Flash point No data available
Autoignition temperature No data available
Decomposition temperature
pH No data available
pH (as aqueous solution) No data available No information available
Kinematic viscosity No data available
Dynamic viscosity No data available
Solubility(ies) No data available
Vapour pressure No data available
Bulk density No data available
Liquid Density No data available
Relative vapour density No data available
Particle characteristics
Particle Size No information available
Particle Size Distribution No information available
9.2. Other information
Molecular weight 228.27
9.2.1. Information with regards to physical hazard classes
Not applicable
9.2.2. Other safety characteristics
No information available

10. STABILITY AND REACTIVITY

10.1. Reactivity
Reactivity No information available.
10.2. Chemical stability
Stability Stable under normal conditions.
Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.
10.3. Possibility of hazardous reactions
Possibility of hazardous reactions None under normal processing.
10.4. Conditions to avoid
Conditions to avoid None known based on information supplied.
10.5. Incompatible materials
Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.
Hazardous decomposition products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
Information on likely routes of exposure
Product Information
Inhalation Specific test data for the substance or mixture is not available.
Eye contact Specific test data for the substance or mixture is not available.
Skin contact Specific test data for the substance or mixture is not available. Causes skin irritation. (based

on components).

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute toxicity

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes skin irritation.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. Suspected of causing cancer.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

IATA

- 14.1 UN number or ID number UN3077
- 14.2 UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (Tioxazafen)
- 14.3 Transport hazard class(es) 9
- 14.4 Packing group III
- Description UN3077, Environmentally hazardous substances, solid, n.o.s. (Tioxazafen), 9, III
- 14.5 Environmental hazards Yes
- 14.6 Special precautions for user
- Special Provisions A97, A158, A179, A197, A215

IMDG

- 14.1 UN number or ID number UN3077
- 14.2 UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (Tioxazafen)
- 14.3 Transport hazard class(es) 9
- 14.4 Packing group III
- Description UN3077, Environmentally hazardous substances, solid, n.o.s. (Tioxazafen), 9, III, Marine pollutant
- 14.5 Marine pollutant P
- Environmental hazards Yes
- 14.6 Special precautions for user
- Special Provisions 274, 335, 966, 967, 969
- EmS-No F-A, S-F No information available
- 14.7 Maritime transport in bulk according to IMO instruments
- No information available

RID

- 14.1 UN number or ID number UN3077
- 14.2 UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (Tioxazafen)
- 14.3 Transport hazard class(es) 9
- 14.4 Packing group III
- Description UN3077, Environmentally hazardous substances, solid, n.o.s. (Tioxazafen), 9, III
- 14.5 Environmental hazards Yes
- 14.6 Special precautions for user
- Special Provisions 274, 335, 375, 601
- Classification code M7

ADR

- 14.1 UN number or ID number UN3077
- 14.2 UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (Tioxazafen)
- 14.3 Transport hazard class(es) 9
- 14.4 Packing group III
- Description UN3077, Environmentally hazardous substances, solid, n.o.s. (Tioxazafen), 9, III, (-)
- 14.5 Environmental hazards Yes
- 14.6 Special precautions for user
- Special Provisions 274, 335, 601, 375
- Classification code M7
- Tunnel restriction code (-)

15. REGULATORY INFORMATION

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- European Union
- Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.
- Authorisations and/or restrictions on use:
- This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)
- This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)
- DIRECTIVE (EU) 2021/1187 on the marketing and use of explosives precursors
- Not applicable
- Persistent Organic Pollutants
- Not applicable
- Dangerous substance category per Seveso Directive (2012/18/EU)
- E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1
- Ozone-depleting substances (ODS) regulation (EC) 1005/2009
- Not applicable
- 15.2. Chemical safety assessment
- Chemical Safety Report A Chemical Safety Assessment is not required for this substance

16. OTHER 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. For lab use only!