

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 27 Mar 2024

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

1.1. Product name:

Hexythiazox Metabolite 1 PT-1-3

1.1. Catalog No.:

689615

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
Acute toxicity - Oral Category 4 - (H302)
Serious eye damage/eye irritation Category 2 - (H319)
Chronic aquatic toxicity Category 3 - (H412)

2.2. Label elements

2.2.1. Pictogram

2.2.2.

2.2. Label elements
Contains (4R,5R)-5-(4-chlorophenyl)-4-methyl-1,3-thiazolidin-2-one Signal word
Warning
Hazard statements
H302 - Harmful if swallowed
H319 - Causes serious eye irritation
H412 - Harmful to aquatic life with long lasting effects
Precautionary Statements - EU (§28, 1272/2008)
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P273 - Avoid release to the environment
P280 - Wear eye protection/ face protection
P337 + P313 - If eye irritation persists: Get medical advice/attention

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

2.3. Other hazards

Harmful to aquatic life.

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII
Chemical name 4R,5R)-5-(4-chlorophenyl)-4-methyl-1,3-thiazolidin-2-one

EU - REACH (1907/2006) - Article 59(1)

- Candidate List of Substances of Very

High Concern (SVHC) for Authorisation

EU - REACH (1907/2006) - Endocrine

Disruptor Assessment List of

Substances

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name (4R,5R)-5-(4-chloro phenyl)-4-methyl-1,
3-thiazolidin-2-one 78587-59-4

Weight-% 100

REACH registration number

EC No

Classification according to Regulation (EC) No. 1272/2008 [CLP] : Acute Tox. 4 (H302) Eye Irrit. 2 (H319)

Aquatic Chronic 3 (H412)

Specific concentration limit (SCL)

M-Factor

M-Factor (long-term)

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

No information available

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

C₁₀H₁₀ClNOS

3.1.2. Molecular Weight (g/mol)

227.71

3.1.3. CAS-No.

78587-59-4

4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Skin contact Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. 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 May cause redness and tearing of the eyes. Burning sensation.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

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. 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 See Section 12 for additional Ecological Information.
- 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.
General hygiene considerations 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. Keep out of the reach of children. 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 (RMM) 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 If splashes are likely to occur, wear safety glasses with side-shields. Avoid contact with eyes. Wear safety glasses with side shields (or goggles).
Hand protection Wear suitable gloves. The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374. Wear protective nitrile rubber gloves. Wear protective Viton(TM) gloves.
Skin and body protection 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 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
Colour off-white
Odour No information available.
Odour threshold No information available
Property Values Remarks o Method
Melting point / freezing point 143 - 145 °C None known
Initial boiling point and boiling range
No data available None known
Flammability No data available None known
Flammability Limit in Air None known
Upper flammability or explosive

limits
No data available
Lower flammability or explosive
limits
No data available
Flash point No data available None known
Autoignition temperature No data available None known
Decomposition temperature None known
pH No data available None known
pH (as aqueous solution) No data available No information available
Kinematic viscosity No data available None known
Dynamic viscosity No data available None known
Water solubility 7.9 mg/l @ 20 °C
Solubility(ies) slightly soluble, Chloroform, Methanol
Partition coefficient 4.5 None known
Vapour pressure No data available None known
Relative density No data available None known
Bulk density No data available
Liquid Density No data available
Relative vapour density No data available None known
Particle characteristics
Particle Size No information available
Particle Size Distribution No information available
9.2. Other information
Molecular weight 227.71
Molecular formula C10 H10 Cl N O S
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 None known based on information supplied.
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. Causes serious eye irritation.
(based on components). May cause redness, itching, and pain.
Skin contact Specific test data for the substance or mixture is not available.
Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause
gastrointestinal irritation, nausea, vomiting and diarrhoea. Harmful if swallowed. (based on
components).
Symptoms related to the physical, chemical and toxicological characteristics
Symptoms May cause redness and tearing of the eyes.
Numerical measures of toxicity
Acute toxicity
Component Information
Chemical name (4R,5R)-5-(4-chlorophenyl)-4-m
ethyl-1,3-thiazolidin-2-one
Oral LD50 = 341 mg/kg (Rat)
Dermal LD50 Inhalation LC50
Delayed and immediate effects as well as chronic effects from short and long-term exposure
Skin corrosion/irritation Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.
Respiratory or skin sensitisation No information available.
Germ cell mutagenicity No information available
Carcinogenicity No information available.
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 Harmful to aquatic life with long lasting effects
Chemical name (4R,5R)-5-(4-chlorophenyl)-4-methyl-1,3-thiazolidin-2-one
Algae/aquatic plants Fish Toxicity to microorganisms -
Crustacea EC50: 13.6 mg/l (Daphnia magna, 48h)
12.2. Persistence and degradability
Persistence and degradability No information available.
12.3. Bioaccumulative potential
Bioaccumulation There is no data for this product.
Component Information
Chemical name Partition coefficient (4R,5R)-5-(4-chlorophenyl)-4-methyl-1,3-thiazolidin-2-one 4.5
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 Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Environmental hazards Not applicable
14.6 Special precautions for user
Special Provisions None
IMDG
14.1 UN number or ID number Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Marine pollutant Not applicable
14.6 Special precautions for user
Special Provisions None No information available
14.7 Maritime transport in bulk according to IMO instruments
No information available
RID
14.1 UN number or ID number Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Environmental hazards Not applicable
14.6 Special precautions for user
Special Provisions None
ADR
14.1 UN number or ID number Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated

14.5 Environmental hazards Not applicable
14.6 Special precautions for user
Special Provisions None

15. REGULATORY INFORMATION

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

Water hazard class (WGK) obviously hazardous to water (WGK 2)

Poland SDS created according to the following Polish regulation: Act of February 25, 2011

on chemical substances and their mixtures (Journal of Laws of 2018, item 143, as

amended). Regulation (EC) No 1907/2006 of the European Parliament and of the

Council on the Registration, Evaluation, Authorization and Restriction of Chemicals

(REACH), establishing the European Chemicals Agency (EC) as amended. Regulation

(EC) No 1272/2008 of the European Parliament and of the Council of 16 December

2008 on classification, labeling and packaging of substances and mixtures, as

amended. Regulation of the Minister of Health of 10 August 2012 on the criteria and

method of classifying chemical substances and their mixtures (Journal of Laws of

2012, item 1018). Regulation of the Minister of Health of 20 April 2012 on labeling

packaging of hazardous substances and mixtures and some mixtures (Journal of

Laws of 2012, item 445). Regulation of the Minister of Family, Labor and Social Policy

of 12 June 2018 on the maximum allowable concentrations and intensities of factors

harmful to health in the work environment (Journal of Laws of 2018, item 1286).

Announcement of the Minister of Economy, Labor and Social Policy of August 28,

2003 on the publication of the unified text of the Ordinance of the Minister of Labor

and Social Policy on general health and safety at work regulations (Journal of Laws

of 2003, No. 169, item 1650). Regulation of the Minister of Health of 30 December

2004 on occupational safety and health related to the presence of chemical agents in

the workplace (Journal of Laws of 2005, No. 11, item 86). Act of December 14, 2012

on waste (Journal of Laws of 2013, item 21) Regulation of the Minister of Health of

December 30, 2004 on occupational health and safety related to the presence of

chemical agents in the workplace (Journal U. of 2005, No. 11, item 86). Waste Act of

December 14, 2012 (Journal of Laws of 2013, item 21). Act of 13 June 2013 on the

management of packaging and packaging waste, Journal of Laws 2013, item 888).

Government statement of September 24, 2002 - European Agreement on the

International Carriage of Dangerous Goods by Road (ADR) (Journal of Laws No. 194,

item 1629 and Journal of Laws of 2003, No. 207, item 2013 and 2014).

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

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

TSCA Contact supplier for inventory compliance status

DSL/NDL Contact supplier for inventory compliance status

EINECS/ELINCS Contact supplier for inventory compliance status

ENCS Contact supplier for inventory compliance status

IECSC Contact supplier for inventory compliance status

KECL Contact supplier for inventory compliance status

PICCS Contact supplier for inventory compliance status

AIIC Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report A Chemical Safety Assessment has been carried out 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!