

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 24 Aug 2022

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

### 1.1. Product name:

Pyridate

### 1.1. Catalog No.:

675283

### 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

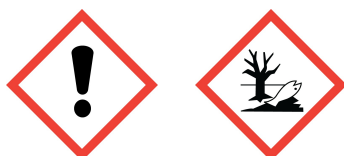
HPC Standards Tel. +49 34291 3372-36  
This number is only available during office hours.

## 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture  
Regulation (EC) No 1272/2008  
Acute toxicity - Oral Category 4 - (H302)  
Skin corrosion/irritation Category 2 - (H315)  
Skin sensitisation Category 1 - (H317)  
Acute aquatic toxicity Category 1 - (H400)  
Chronic aquatic toxicity Category 1 - (H410)

### 2.2. Label elements

#### 2.2.1. Pictogram



#### 2.2.2.

2.2. Label elements  
259-686-7

Contains pyridate (ISO)

Signal word

Warning

Hazard statements

H302 - Harmful if swallowed

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

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

P264 - Wash face, hands and any exposed skin thoroughly after handling

P273 - Avoid release to the environment

P280 - Wear protective gloves

P391 - Collect spillage

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

2.3. Other hazards

No information available.

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

Chemical name 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

pyridate (ISO)

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name pyridate (ISO)55512-33-9

Weight-% 100

REACH registrationnumber :(-)

EC No 259-686-7

Classification according to Regulation (EC) No.1272/2008 [CLP]:Acute Tox. 4 (H302) Skin Irrit. 2 (H315)Skin Sens. 1 (H317)Aquatic Acute 1(H400)Aquatic Chronic 1(H410)

Specific concentration limit (SCL):M=1M(Chronic)=10oral:ATE =500 mg/kg (-)

M-Factor M-Factor(long-term)

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

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name:pyridate (ISO)55512-33-9

Oral LD50 mg/kg 500 +1431

Dermal LD50 mg/kg:3400

Inhalation LC50 - 4hour - dust/mist - mg/L

Inhalation LC50 - 4

hour - vapour - mg/L

Inhalation LC50 - 4

hour - gas - ppmNo data 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

C19H23ClN2O2S

### 3.1.2. Molecular Weight (g/mol)

378.92

### 3.1.3. CAS-No.

55512-33-9

## 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. 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 May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor. Wash off immediately with soap and plenty of water for at least 15 minutes.

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 Itching. Rashes. Hives

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

Note to doctors May cause sensitisation in susceptible persons. 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

Product is or contains a sensitiser. May cause sensitisation by skin contact.

### 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. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

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. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

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 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.

Duration of contact PPE - Glove material Glove thickness Break through time

Wear protective Viton(TM) gloves

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 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 with a low melting point

Colour colourless

Odour No information available.

Odour threshold No information available

Property Values Remarks o Method

Melting point / freezing point 27 °C None known

Boiling point / boiling range > 160 °C None known

Flammability (solid, gas) 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 131 °C None known

Autoignition temperature No data available None known

Decomposition temperature > 160 °C 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 1.49 mg/L None known

Solubility(ies) No data available None known

Partition coefficient 4.01 None known

Vapour pressure 4.8e-9 hPa None known

Relative density 1.16 g/cm<sup>3</sup> 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 378.95

Molecular formula C<sub>19</sub>H<sub>23</sub>CIN<sub>2</sub>O<sub>2</sub>S

### 9.2.1. Information with regards to physical hazard classes

Not applicable > 160 °C > 160 °C

### 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 oxidising 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. May cause irritation of respiratory tract.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact May cause sensitisation by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.

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 Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute toxicity

Component Information

Chemical name Oral LD50 Dermal LD50 Inhalation LC50

pyridate (ISO) = 1431 mg/kg ( Rat ) = 3400 mg/kg ( Rabbit ) > 4.37 mg/L ( Rat ) 4 h

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. Irritating to skin.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation May cause sensitisation by skin contact.

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 Very toxic to aquatic life with long lasting effects.

Chemical name: pyridate (ISO)

Algae/aquatic plants EC50: =4.93mg/L (96h,

Pseudokirchneriella

subcapitata)

EC50: =82mg/L (96h,

Desmodesmus

subspicatus)

EC50: =4.93mg/L (96h,

Pseudokirchneriella

subcapitata)

Fish LC50: =1.2mg/L (96h,

Oncorhynchus mykiss)

LC50: =140mg/L (96h,

Lepomis macrochirus)

LC50: =61.1mg/L (96h,

Cyprinus carpio)  
LC50: >1.2mg/L (96h,  
Oncorhynchus mykiss)  
LC50: >2mg/L (96h,  
Lepomis macrochirus)  
LC50: >2.1mg/L (96h,  
Lepomis macrochirus)  
LC50: >20mg/L (96h,  
Oncorhynchus mykiss  
Toxicity to  
microorganisms (-)  
Crustacea EC50: 1.02 - 1.15mg/L  
(48h, Daphnia magna)  
EC50: =0.83mg/L (48h,  
Daphnia magna  
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  
pyridate (ISO) 4.01  
12.4. Mobility in soil  
Mobility in soil No information available.  
12.5. Results of PBT and vPvB assessment  
PBT and vPvB assessment No information available.  
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. (pyridate (ISO))  
14.3 Transport hazard class(es) 9  
14.4 Packing group III  
Description UN3077, Environmentally hazardous substances, solid, n.o.s. (pyridate (ISO)), 9, III  
14.5 Environmental hazards Yes  
14.6 Special precautions for user  
Special Provisions A97, A158, A179, A197, A215  
ERG Code 9L  
IMDG  
14.1 UN number or ID number UN3077  
14.2 UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (pyridate (ISO))  
14.3 Transport hazard class(es) 9  
14.4 Packing group III  
Description UN3077, Environmentally hazardous substances, solid, n.o.s. (pyridate (ISO)), 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. (pyridate (ISO))  
14.3 Transport hazard class(es) 9  
14.4 Packing group III  
Description UN3077, Environmentally hazardous substances, solid, n.o.s. (pyridate (ISO)), 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. (pyridate (ISO))  
14.3 Transport hazard class(es) 9  
14.4 Packing group III  
Description UN3077, Environmentally hazardous substances, solid, n.o.s. (pyridate (ISO)), 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  
Water hazard class (WGK) strongly hazardous to water (WGK 3)  
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  
Plant protection products directive (91/414/EEC)  
Chemical name Plant protection products directive (91/414/EEC)  
pyridate (ISO) - 55512-33-9 Plant protection agent  
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  
AICS 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!