

Revision Date 19-Apr-2012

Revision Number 4

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

Product Identifier Product Description: Cat No. Synonyms

Piperidine hydrochloride 131310000; 131310050; 131315000 Hexahydropyridine hydrochloride.

Relevant identified uses of the substance or mixture and uses advised againstRecommended UseLaboratory chemicalsUses advised againstNo Information available

Details of the supplier of the safety data sheet Company Acros Organics BVBA Janssen Pharmaceuticalaan 3a 2440 Geel, Belgium E-mail address begel.sds

begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300 CHEMTREC Phone Number, Europe: 001-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture REGULATION (EC) No 1272/2008

Acute oral toxicity

Category 3

Classification according to EU Directives 67/548/EEC or 1999/45/ECFor the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16Symbol(s)T - ToxicR-phrase(s)R25 - Toxic if swallowed

Label Elements





Revision Date 19-Apr-2012

SECTION 2. HAZARDS IDENTIFICATION



Signal Word Hazard Statements H301 - Toxic if swallowed Danger

Precautionary Statements - EU (§28, 1272/2008) P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician

Other Hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | EC-No. | Weight % | CAS-No | 67/548/EEC Classification | CLP Classification - Regulation (EC) No 1272/2008 | REACH No. |
|--|-------------------|----------|-----------|------------------------------|--|-----------|
| Piperidine, hydrochloride 6091-44-7 | EEC No. 228-033-8 | 99 | 6091-44-7 | T; R25 | Acute Tox. 3 (H301) | - |

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4. FIRST AID MEASURES

| Description of first aid measures Eye Contact | Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. |
|--|--|
| Skin Contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required. |
| Ingestion | Call a physician immediately. Clean mouth with water. |
| Inhalation | Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required. |





Revision Date 19-Apr-2012

Notes to Physician

Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media Water spray. Carbon dioxide (CO₂). Dry chemical. chemical foam.

Extinguishing media which must not be used for safety reasons No information available.

Special hazards arising from the substance or mixture

Dust can form an explosive mixture in air.

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Use only in area provided with appropriate exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

Specific End Uses

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION



Piperidine hydrochloride

Revision Date 19-Apr-2012

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION **Control parameters** This product, as supplied, does not contain any hazardous materials with occupational **Exposure limits** exposure limits established by the region specific regulatory bodies. **Biological limit values** 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** No information available. (PNEC) **Exposure controls Engineering Measures** Ensure adequate ventilation, especially in confined areas Personal protective equipment Eve Protection Goggles Hand Protection Protective gloves Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN **Respiratory Protection** 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced **Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice No information available. **Environmental exposure controls**

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Appearance odor pH Boiling Point/Range Melting Point/Range Flash Point Autoignition Temperature Water Solubility Molecular Formula Molecular Weight Powder, Solid White odorless 6-8 No information available. 245 - 249°C / 473 - 480.2°F 100°C / 212°F No information available. soluble > 1500 g/l in water C5 H11 N . H Cl 121.61

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Hygroscopic.

Possibility of Hazardous Reactions



Piperidine hydrochloride

Revision Date 19-Apr-2012

| Hazardous Polymerization | No information available. |
|--------------------------|---------------------------|
| Hazardous Reactions . | No information available. |

Conditions to Avoid

Incompatible products, Exposure to moist air or water.

Incompatible Materials

Bases, Strong oxidizing agents, Strong acids, alkaline.

Hazardous Decomposition Products

Hydrogen chloride gas. Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------------------|-----------------|-------------|-----------------|
| Piperidine, hydrochloride | 133 mg/kg (Rat) | | |

| Chronic Toxicity Carcinogenicity | There are no known carcinogenic chemicals in this product | | | | | | |
|--|--|--|--|--|--|--|--|
| Sensitization Mutagenic Effects Reproductive Effects Developmental Effects Target Organs Other Adverse Effects Endocrine Disruptor Information | No information available. No information available No information available. No information available. No information available. The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information None known | | | | | | |

SECTION 12. ECOLOGICAL INFORMATION

Toxicity



Piperidine hydrochloride

Revision Date 19-Apr-2012

 Ecotoxicity effects
 Do not flush into surface water or sanitary sewer system Do not allow material to contaminate ground water system Do not empty into drains

 Persistence and degradability
 No information available

 Bioaccumulative potential
 Volume

 No information available.
 Volume

 Mobility in soil
 Volume

 No information available.
 Volume

 Results of PBT and vPvB assessment
 Volume

 Other adverse effects
 Volume

No information available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

| Waste from Residues / Unused Products | Dispose of in accordance with local regulations |
|--|--|
| Contaminated Packaging | Empty containers should be taken to local recyclers for disposal |

SECTION 14. TRANSPORT INFORMATION

IMDG/IMO

| | UN-No Hazard Class Packing Group | 2811 6.1 III |
|-------------|--|--------------------|
| <u>ADR</u> | UN-No Hazard Class Packing Group | 2811 6.1 III |
| <u>IATA</u> | | |
| | UN-No | 2811 |
| | | 0.4 |

| UN-No | 281 |
|---------------|-----|
| Hazard Class | 6.1 |
| Packing Group | 111 |



Revision Date 19-Apr-2012

SECTION 14. TRANSPORT INFORMATION

SECTION 15. REGULATORY INFORMATION

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

International Inventories

| Component | EINECS | ELINCS | NLP | TSCA | DSL | NDSL | PICCS | ENCS | CHINA | AICS | KECL |
|---------------------------|-----------|--------|-----|------|-----|------|-------|------|-------|------|------|
| Piperidine, hydrochloride | 228-033-8 | - | | Х | - | Х | Х | Х | Х | - | - |

Legend

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

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

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

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

AICS - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

SECTION 16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R25 - Toxic if swallowed

Revision Date Revision Summary 19-Apr-2012

Reason for revision Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.





Revision Date 19-Apr-2012

End of Safety Data Sheet