SAFETY DATA SHEET



Revision Date 03-Nov-2010

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

| Product Identifier | |
|----------------------|--|
| Product Description: | 2-Chlorobenzoic acid |
| Cat No. | 159240000; 159240050; 159241000; 159245000 |
| Synonyms | OCBA |

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.sdsdesk@thermofisher.com Emergency Telephone Number For information in the US, call: 800-ACROS-01 For information in Europe, call: +32 14 57 52 11

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

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

2. HAZARDS IDENTIFICATION

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

| Skin Corrosion / irritation | Category 2 |
|---|-------------|
| Serious Eye Damage/Eye Irritation | Category 2A |
| Specific target organ systemic toxicity (single exposure) | Category 3 |

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R phrases mentioned in this Section, see Section 16Symbol(s)Xi - IrritantR -phrase(s)noneRisk Combination PhrasesR36/37/38 - Irritating to eyes, respiratory system and skin

Label Elements

2. HAZARDS IDENTIFICATION



Signal Word

Warning

Hazard Statements

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H315 - Causes skin irritation

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

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P280 - Wear protective gloves/protective clothing/eye protection/face protection P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Other Hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | EC No. | Weight % | CAS-No | Classification | GHSCLAS |
|----------------------|-----------------------|----------|----------|----------------|---|
| o-Chlorobenzoic acid | EEC No. 204- 285-4 | 98 | 118-91-2 | Xi; R36/37/38 | STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) |

For the full text of the R phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

| Description of first aid measures Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Obtain medical attention |
|--|--|
| Skin Contact | Wash off immediately with soap and plenty of water Obtain medical attention |
| Ingestion | Clean mouth with water Get medical attention |
| Inhalation | Remove from exposure, lie down Move to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration Obtain medical attention |
| Notes to Physician | Treat symptomatically |

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

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

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes Do not breathe dust Do not breathe vapors or spray mist

Conditions for safe storage, including any incompatibilities

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

Specific End Uses

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| 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. |
|---|---|
| Derived No Effect Level (DNEL) | No information available. |
| Predicted No Effect Concentration (PNEC) | No information available. |
| Exposure controls | |
| Engineering Measures | Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers are close to the workstation location |
| Personal protective equipment | |
| Eye Protection Hand Protection Skin and body protection | Goggles Protective gloves Wear appropriate protective gloves and clothing to prevent skin exposure |
| | |

| 8. EX | POSURE CONTROLS / PERSONAL PROTECTION |
|------------------------|--|
| Respiratory Protection | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 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 |
| Hygiono Mossuros | Handle in accordance with good industrial bygiene and safety practice |

Hygiene Measures Environmental exposure controls Handle in accordance with good industrial hygiene and safety practice No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Appearance odor pH Boiling Point/Range Melting Point/Range Flash Point Water Solubility Molecular Formula Molecular Weight Powder, Solid Off-white odorless 3.4 0.2 g/l aq.sol. 285°C / 545°F@ 760 mmHg 139 - 143°C / 282.2 - 289.4°F 173°C / 343.4°F soluble in hot water C7 H5 Cl O2 156.57

10. STABILITY AND REACTIVITY

Reactivity Chemical Stability Stable under normal conditions.

Possibility of Hazardous Reactions Hazardous Polymerization Hazardous Reactions .

No information available. No information available.

<u>Conditions to Avoid</u> Avoid dust formation, Incompatible products, Exposure to moisture.

Incompatible Materials Strong oxidizing agents, Strong bases. Hazardous Decomposition Products Hydrogen chloride gas. Carbon monoxide (CO). Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity Product Information

No acute toxicity information is available for this product

Component Information

Chronic Toxicity Carcinogenicity

There are no known carcinogenic chemicals in this product

11. TOXICOLOGICAL INFORMATION

| Sensitization | No information available. |
|---------------------------------|--|
| Mutagenic Effects | No information available |
| Reproductive Effects | No information available. |
| Developmental Effects | No information available. |
| Target Organs | No information available. |
| Other Adverse Effects | The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information |
| Endocrine Disruptor Information | None known |

12. ECOLOGICAL INFORMATION

| Toxicity | |
|-------------------------|-----|
| Ecotoxicity effe | cts |

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

 No information available.

 Mobility in soil

 No information available.

 Results of PBT and vPvB assessment

 Other adverse effects

 No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods Waste from Residues / Unused Products Contaminated Packaging

Dispose of in accordance with local regulations

Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

IMDG/IMO

| UN-No | UN3261 |
|----------------------|--|
| Hazard Class | 8 |
| Packing Group | III |
| Proper Shipping Name | CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. |

ADR

| UN-No | UN3261 |
|----------------------|--|
| Hazard Class | 8 |
| Packing Group | III |
| Proper Shipping Name | CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. |

IATA

14. TRANSPORT INFORMATION

UN-No Hazard Class Packing Group Proper Shipping Name UN3261 8 III

CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

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 |
|----------------------|-----------|--------|-----|------|-----|------|-------|------|-------|------|----------|
| o-Chlorobenzoic acid | 204-285-4 | - | | Х | Х | - | Х | Х | Х | Х | KE-05533 |
| | | | | | | | | | | | Х |

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory EINECS/ELINCS - European Inventory Lists 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

16. OTHER INFORMATION

Text of R phrases mentioned in Section 2-3

R36/37/38 - Irritating to eyes, respiratory system and skin

| Revision Date | 03-Nov-2010 |
|--------------------------------------|---|
| Revision Summary | Not applicable |
| This safety data sheet complies with | the requirements of Regulation (EC) No. 1907/2006 |

Disclaimer

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End of Safety Data Sheet