SAFETY DATA SHEET

11



Revision Date 15-Apr-2014

Revision Number 5

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

1.1. Product identifier

| Product Description: Cat No. : CAS-No Molecular Formula | (1-Methyl-1H-pyrazol-5-yl)methylamine 456030000; 456030010; 456030050 863548-52-1 C5 H9 N3 |
|--|---|
| 1.2. Relevant identified uses of the s | substance or mixture and uses advised against |
| Recommended Use Uses advised against | Laboratory chemicals No Information available |
| 1.3. Details of the supplier of the saf | ety data sheet |
| Company | Acros Organics BVBA Janssen Pharmaceuticalaan 3a 2440 Geel, Belgium |
| E-mail address | begel.sdsdesk@thermofisher.com |
| 1.4. Emergency telephone number | For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 Emergency Number US :001-201-796-7100 / Europe : +32 14 57 52 99 CHEMTREC Tel. No. US :001-800-424-9300 / Europe :001-703-527-3887 |

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - Regulation (EC) No 1272/2008

Physical hazards Based on available data, the classification criteria are not met

Health hazards Skin Corrosion/irritation Serious Eye Damage/Eye Irritation

Environmental hazards

Category 1 B Category 1

Based on available data, the classification criteria are not met

Classification according to EU Directives 67/548/EEC or 1999/45/ECSymbol(s)C - CorrosiveR-phrase(s)R34 - Causes burns

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

2.2. Label elements

(1-Methyl-1H-pyrazol-5-yl)methylamine



Signal Word

Danger

Hazard Statements

H314 - Causes severe skin burns and eye damage

Precautionary Statements

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P280 - Wear 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

P310 - Immediately call a POISON CENTER or doctor/ physician

2.3. Other hazards

No information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| С | omponent | CAS-No | EC-No. | Weight % | CLP Classification - Regulation (EC) No 1272/2008 | DSD Classification - 67/548/EEC |
|----|----------------------------------|-------------|--------|----------|---|------------------------------------|
| `` | iyl-1H-pyrazol-5- nethylamine | 863548-52-1 | | >95 | Skin Corr. 1B (H314) Eye Dam. 1 (H318) | C;R34 |

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

SECTION 4: FIRST AID MEASURES

4.1. 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 | Do not induce vomiting. Call a physician immediately. | |
| 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. | |
| Protection of First-aiders | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination | |
| 4.2. Most important symptoms and effects, both acute and delayed | | |
| | Causes burns by all exposure routes. Product is a corrosive material. Use of dastric layage or | |

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

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

(1-Methyl-1H-pyrazol-5-yl)methylamine

Notes to Physician

Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Carbon dioxide (CO₂). Dry chemical. chemical foam.

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

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

Hazardous Combustion Products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO₂).

5.3. Advice for firefighters

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

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Do not let this chemical enter the environment.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Corrosives area. Store under an inert atmosphere. Keep refrigerated. To maintain product quality.

7.3. Specific end use(s)

Use in laboratories

SECTION 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 limit values

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

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

Derived No Effect Level (DNEL) No information available.

| Route of exposure | Acute effects (local) | Acute effects (systemic) | Chronic effects (local) | Chronic effects (systemic) |
|-------------------|-----------------------|-----------------------------|-------------------------|-------------------------------|
| Oral | | | | |
| Dermal | | | | |
| Inhalation | | | | |

Predicted No Effect Concentration No information available. (PNEC)

8.2. Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

Personal protective equipment Eve Protection

Eye Protection Goggles (European standard - EN 166)

Hand Protection Protective gloves

| Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments |
|---|-----------------------------------|-----------------|-------------|-----------------------|
| Natural rubber Nitrile rubber Neoprene PVC | See manufacturers recommendations | - | EN 374 | (minimum requirement) |

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Remove gloves with care avoiding skin contamination.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly.

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| Large scale/emergency use | Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced Recommended Filter type: Organic gases and vapours filter, Type A, Brown, conforming to EN14387. |
|----------------------------|--|
| Small scale/Laboratory use | Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |

| Recommended half mask:- Valve filtering: EN405 or Half mask: EN140 plus filter, EN 141 |
|--|
| When RPE is used a face piece Fit Test should be conducted. |

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| Appearance Physical State Odor Odor Threshold pH | Colorless Liquid. No information available No data available No data available | |
|---|---|---|
| Melting Point/Range Softening Point Boiling Point/Range Flash Point | No data available No data available 140°C / 284°F No information available. | @ 8 mm Hg Method - No information available |
| Evaporation Rate Flammability (solid,gas) Explosion Limits | No data available Not applicable No data available. | Liquid |
| Vapor Pressure Vapor Density Specific Gravity / Density Bulk Density Water Solubility Solubility in other solvents | No data available No data available No data available Not applicable No information available No information available | (Air = 1.0) Liquid |
| Partition Coefficient (n- octanol/water) | | |
| Autoignition Temperature Decomposition temperature Viscosity Explosive Properties Oxidizing Properties | No data available No data available No data available No information available No information available | |
| 9.2. Other information | | |
| Molecular Formula Molecular Weight | C5 H9 N3 111.15 | |

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None known, based on information available.

SECTION 10: STABILITY AND REACTIVITY

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

| Hazardous Polymerization Hazardous Reactions | No information available. No information available. |
|---|--|
| 10.4. Conditions to avoid | Incompatible products. |
| 10.5. Incompatible materials | Strong oxidizing agents. Strong acids. Strong reducing agents. Acid chlorides. |

10.6. Hazardous decomposition products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects **Product Information** No acute toxicity information is available for this product (a) acute toxicity; No data available Oral Dermal No data available Inhalation No data available (b) skin corrosion/irritation; Category 1 B (c) serious eye damage/irritation; Category 1 (d) respiratory or skin sensitization; Respiratory No data available Skin No data available No data available (e) germ cell mutagenicity; No data available (f) carcinogenicity; There are no known carcinogenic chemicals in this product (g) reproductive toxicity; No data available No data available (h) STOT-single exposure; No data available (i) STOT-repeated exposure; No information available **Target Organs** (j) aspiration hazard; No data available The toxicological properties have not been fully investigated. **Other Adverse Effects** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible Symptoms / effects, perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, both acute and delayed severe damage to the delicate tissue and danger of perforation.

SECTION 12: ECOLOGICAL INFORMATION

| 12.1. Toxicity Ecotoxicity effects | Do not empty into drains. |
|---|---|
| 12.2. Persistence and degradability | No information available |
| 12.3. Bioaccumulative potential | No information available. |
| 12.4. Mobility in soil | No information available. |
| 12.5. Results of PBT and vPvB assessment | No data available for assessment |
| 12.6. Other adverse effects Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential | This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance |

SECTION 13: DISPOSAL CONSIDERATIONS

| 13.1. Waste treatment methods | |
|--|--|
| Waste from Residues / Unused Products | Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations. |
| Contaminated Packaging | Dispose of this container to hazardous or special waste collection point |
| European Waste Catalogue (EWC) | According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. |
| Other Information | Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not dispose of waste into sewer. Large amounts will affect pH and harm aquatic organisms. |

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

| 14.1. UN number 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group | 2735 AMINES, LIQUID, CORROSIVE, N.O.S. 8 III |
|---|--|
| ADR | |
| 14.1. UN number 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group | 2735 AMINES, LIQUID, CORROSIVE, N.O.S. 8 III |
| ΙΑΤΑ | |
| 14.1. UN number 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group | 2735 AMINES, LIQUID, CORROSIVE, N.O.S.* 8 III |
| 14.5. Environmental hazards | No hazards identified |
| 14.6. Special precautions for user | No special precautions required |

14.7. Transport in bulk according to
Annex II of MARPOL73/78 and the
IBC CodeNot applicable, packaged goods

IBC Code

SECTION 15: REGULATORY INFORMATION

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

International Inventories X = listed

National Regulations

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment Take note of Dir 94/33/EC on the protection of young people at work 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

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

SECTION 16: OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3 R34 - Causes burns

Full text of H-Statements referred to under sections 2 and 3

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

Legend

| CAS - Chemical Abstracts Service EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances | TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIOC - New Zealand Inventory of Chemicals |
|--|--|
| WEL - Workplace Exposure Limit ACGIH - American Conference of Governmental Industrial Hygienists DNEL - Derived No Effect Level RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic | TWA - Time Weighted Average IARC - International Agency for Research on Cancer PNEC - Predicted No Effect Concentration LD50 - Lethal Dose 50% EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative |
| ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code OECD - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor Key literature references and sources for data Suppliers safety data sheet, Chemadvisor - LOLI, | ICAO/IATA - International Civil Aviation Organization/International Air Transport Association MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate VOC - Volatile Organic Compounds |

Merck index, RTECS

(1-Methyl-1H-pyrazol-5-yl)methylamine

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

| Revision Date | 15-Apr-2014 |
|------------------|----------------|
| Revision Summary | 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.

End of Safety Data Sheet