4-(Dimethylamino)pyridine
Safety Data Sheet
according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance
Trade name : 4-(Dimethylamino)pyridine
Chemical name : N,N-dimethylpyridin-4-amine
CAS RN : 1122-58-3
Formula : C₇H₁₀N₂

1.2. Relevant identified uses of the substance or mixture and uses advised against

4-Dimethylaminopyridine is widely used as a hypernucleophilic acylation catalyst. It is also used as an intermediate in the pharmaceutical industry for the synthesis of Zidovudine, Abacavir, Lamivudine (anti-HIV treatment drugs), Alfentanil (an opioid analgesic), Cladribine (a chemotherapy drug) and Sufentanil, which is used as an analgesic for incident pain. It is also used in Agrochemical industry for the synthesis of the insecticide Chlorpyrifos.

1.3. Details of the supplier of the safety data sheet

Jubilant Life Sciences Limited
FACTORY & REGISTERED OFFICE: Jubilant Life Sciences Ltd., Bhartiagram, Gajraula, District: Amroha, Uttar Pradesh-244223, India
T +91-5924-252353 to 252360  Contact Department-Safety: Ext. 7424  F +91-5924-252352
HEAD OFFICE: Jubilant Life Sciences Ltd., Plot 1-A, Sector 16-A, Institutional Area, Noida, Uttar Pradesh, 201301 - India
T +91-120-4361000 - F +91-120-4234881 / 84 / 87 / 95 / 96 support@jubl.com - www.jubl.com

1.4. Emergency telephone number

Emergency number : +91-9997022412; +91-9359674864

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Acute toxicity (oral), Category 3 H301 Toxic if swallowed
Acute toxicity (dermal) Category 1 H310 Fatal in contact with skin
Skin corrosion/irritation Category 2 H315 Causes skin irritation
Serious eye damage/eye irritation, Category 2A H319 Causes serious eye irritation
Specific target organ toxicity (single exposure) Category 3 H335 May cause respiratory irritation
Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412 Harmful to aquatic life with long lasting effects
Full text of H statements : see section 16

2.2. Label elements

HAZARD PICTOGRAMS (GHS-US) :

Signal Word (GHS-US) : Danger

HAZARD STATEMENTS (GHS-US)

H315: Causes skin irritation.
H301: Toxic if swallowed.
H310: Fatal in contact with skin.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H412: Harmful to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS (GHS-US)

P261: Avoid breathing dust
P264: Wash hand thoroughly after handling
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P312: Call a poison center or doctor/physician if you feel unwell.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove
接触镜，如有，易于进行。继续冲洗。
P337+P313：如果眼刺激持续：获得医疗建议/关注。
P302+P352：如果皮肤：用大量肥皂和水冲洗。
P332+P313：如果皮肤刺激发生：获得医疗建议/关注。
P304+P340：如果吸入：将受害者移至新鲜空气并保持在放松的姿势以舒适的呼吸。
P405：存放起来，锁好。
P501：根据当地/区域/国家/国际规定（如适用）处理内容物/容器。  

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS #</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-(Dimethylamino)pyridine</td>
<td>1122-58-3</td>
<td>~100%</td>
<td>Acute toxicity (oral), H301</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Acute toxicity (dermal) 1, H310</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin corrosion/irritation 2, H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Serious eye damage/eye irritation, 2A H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Specific target organ toxicity (single exposure) 3, H335</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic environment — Chronic Hazard 3 H412</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures

- **Acute effects:**
  - **Eyes:** Irritating to skin and eyes and eyelids. More than ordinary care should be used to prevent eye contact.
  - **Skin:** HIGHLY TOXIC via the dermal route. Extended contact with this material could be fatal. More than ordinary care should be used to prevent skin.
  - **Ingestion:** This material is considered to be toxic via the oral route.
  - **Inhalation:** Although data on inhalation toxicity are unavailable, it may be assumed that this material is toxic via inhalation. Symptoms of overexposure may include headache, nausea, disorientation, weakness and convulsions.

- **Chronic effects:**
  - This material is readily absorbed from the gastrointestinal tract, the skin and the respiratory tract. Extended contact with this material could result in severe health effects or death.

#### 4.2 Most important symptoms and effects, both acute and delayed

- **Eyes:** If in eyes rinse cautiously with water for at least 15 minutes. Remove contact lenses if easy to do so. Continue rinsing. Seek medical attention.
- **Skin:** Immediately take off all contaminated clothing. Wash thoroughly with water for at least 15 minutes. Wash contaminated clothes before reuse. Seek immediate medical attention.
- **Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if you feel unwell. Monitor for respiratory distress. Apply artificial respiration if not breathing. Do not use mouth-to-mouth methods if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

  **Ingestion:** If swallowed call a poison center if you feel unwell. Rinse mouth. Do NOT induce vomiting by use of emetics. Seek medical attention.

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

Treat symptomatically.

### SECTION 5: FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

- Suitable extinguishing media: Foam, Dry powder, Carbon dioxide, Water spray
- Unsuitable extinguishing media: Do not use a heavy water stream

#### 5.2 Special hazards arising from the substance or mixture

- **Fire hazard:** Heavier than air, vapours may travel long distances along ground, ignite and flash back to source.
- **Explosion hazard:** Risk of explosion with vapours in confined spaces, drainage and sewage system.
Reactivity in case of fire

Thermal decomposition generates: Toxic vapours which could include nitrogen oxides, carbon monoxide and cyanide.

Hazardous decomposition products in case of fire: Hazardous decomposition products may be released during prolonged heating like smoke, carbon dioxide, nitrogen oxides.

5.3 Advice for firefighters

Precautionary measures fire

Appropriate self-contained breathing apparatus may be required.

Firefighting instructions

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. In case of major fire, evacuate area.

Protective equipment for firefighters

Do not enter fire area without proper protection equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

For small spills, absorb or cover with dry earth, sand, or other inert non-combustible absorbent material and place into waste containers for later disposal. Avoid breathing dust. Avoid contact with skin, eyes and clothing. For larger spills, dike area and pump into waste containers. Contain large spills to maximize product recovery or disposal. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Remove all sources of ignition. Shovel material into a convenient waste disposal container. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected. If the product enters drains or sewers the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the National Rivers Authority. Use personal protective equipment as required. For further information refer to section 8: Exposure-controls/personal protection.

6.1.1. For non-emergency personnel

Protective equipment

Wear a NIOSH approved respirator if dust will be generated in clean-up. EN 166.

Emergency procedures

Evacuate unnecessary personnel. Avoid breathing dust.

Measures in case of dust release

Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting.

6.1.2. For emergency responders

Protective equipment

Equip cleanup crew with proper protection.

Emergency procedures

Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment

Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

Methods for cleaning up

On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

see Section 1 for emergency contact information. For disposal of residues refer to section 13: Disposal considerations. For further information refer to section 8: Exposure-controls/personal protection.

SECTION 7: Handling and storage
4-(Dimethylamino)pyridine
Safety Data Sheet
according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

7.1. Precautions for safe handling

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Do not get in eyes, on skin, or on clothing. Avoid breathing dust. Use only outdoors or in a well-ventilated area.

Hygiene measures: Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep only in the original container in a cool, well ventilated place away from: Ignition sources, Water, humidity, Incompatible materials. Keep container tightly closed.

Packaging materials: High density polyethylene (HDPE). Keep only in the original container.

7.3. Specific end use(s)

refer to section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits. In case of inadequate ventilation wear respiratory protection. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Handle in accordance with good industrial hygiene and safety procedures.

Personal protective equipment: Avoid all unnecessary exposure.

Materials for protective clothing: According to the conditions of use, protective gloves, apron, boots, head and face protection must be worn. In case of repeated or prolonged exposure use Chemical resistant protective apron/clothing (tested to EN 14605 or equivalent); Chemical resistant gloves (according to European standard EN 374 or equivalent)

Hand protection: Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. It is a good industrial hygiene practice to minimize skin contact

Eye protection: Chemical goggles or safety glasses. (ANSI Z87.1 or approved equivalent). Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles

Skin and body protection: Use chemically protective clothing. Boots

Respiratory protection: Wear appropriate mask. (NIOSH-approved). Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

Other information: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>crystalline</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>122.17 g/mol</td>
</tr>
<tr>
<td>Colour</td>
<td>white</td>
</tr>
<tr>
<td>Odour</td>
<td>Slightly amine like.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
</tbody>
</table>
4-(Dimethylamino)pyridine
Safety Data Sheet
according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

pH solution : 11 at 60mg/L aqueous solution @ 20 Deg. C
Relative evaporation rate (butyl acetate=1) : No data available
Relative evaporation rate (ether=1) : No data available
Melting point : 110 - 113 °C
Freezing point : No data available
Boiling point : 162 °C at 50 mm Hg
Flash point : 110 °C Closed Cup
Auto-ignition temperature : 420 °C
Decomposition temperature : No data available
Flammability (solid, gas) : Non Flammable
Vapour pressure : 1 mm Hg at 25 Deg. C (Established)
Vapour pressure at 50 °C : No data available
Critical pressure : No data available
Relative vapour density at 20 °C : No data available Relative
density : 0.96 g/cm³ at 20 Deg. C
Solubility : Water: 76 g/l @ 20 Deg. C
Log Pow : 1.34 Octanol-Water
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available.
Oxidising properties : No data available.
Explosive limits : No data available.

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Product is not explosive.

10.2. Chemical stability
Stable at normal temperatures and pressures.

10.3. Possibility of hazardous reactions
Hazardous polymerisation does not occur. Reacts with : Incompatible materials.

10.4. Conditions to avoid
Keep away from extreme heat, sparks, open flame, and strongly oxidizing conditions. Avoid static electricity discharges. Avoid shock and friction. Protect from moisture.

10.5. Incompatible materials
Strong oxidizing agents. Strong acids. strong bases.

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Oral: Toxic if swallowed. Dermal: Fatal in contact with skin.

4-(Dimethylamino)pyridine (1122-58-3)
LD50 oral rat 250 mg/kg National Technical Information Service. Vol. OTS0536502
LD50 dermal rabbit 13 mg/kg National Technical Information Service. Vol. OTS0536502,

Skin corrosion/irritation : Causes skin irritation.
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/irritation</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified</td>
</tr>
<tr>
<td></td>
<td>Inhalation of dust may cause irritation of the respiratory system.</td>
</tr>
<tr>
<td></td>
<td>Based on available data, the classification criteria are not met</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>No information is available and no adverse mutagenic effects are anticipated</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified (This product is not known to contain any components at concentrations above 0.1% which are considered carcinogenic by OSHA, IARC or NTP.)</td>
</tr>
<tr>
<td></td>
<td>Based on available data, the classification criteria are not met</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
<tr>
<td>Potential Adverse human health effects and symptoms</td>
<td>Toxic if swallowed. Fatal in contact with skin. Irritating to eyes, respiratory system and skin</td>
</tr>
</tbody>
</table>
SECTION 12: Ecological information

12.1. Toxicity

**4-(Dimethylamino)pyridine (1122-58-3)**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>11.6 mg/l Danio rerio (zebra fish) 96h</td>
<td></td>
</tr>
<tr>
<td>EC50 other aquatic organisms 1</td>
<td>&gt; 100 mg/l Daphnia magna (Water flea) 48h</td>
<td></td>
</tr>
<tr>
<td>EC50 72h algae (1)</td>
<td>1.82 - 4.22 mg/l Pseudokirchneriella subcapitata (green algae)</td>
<td>72h</td>
</tr>
<tr>
<td>NOEC (acute)</td>
<td>5 mg/l Danio rerio (zebra fish) 96h</td>
<td></td>
</tr>
<tr>
<td>NOEC chronic algae</td>
<td>0.4 mg/l Pseudokirchneriella subcapitata (green algae) 72h</td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

**4-(Dimethylamino)pyridine (1122-58-3)**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

**4-(Dimethylamino)pyridine (1122-58-3)**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioconcentration factor (BCF REACH)</td>
<td>2.17 estimated</td>
</tr>
<tr>
<td>Log Pow</td>
<td>1.34 Octanol-Water</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| Waste disposal recommendations   | Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with applicable local, national and international regulation. |
| Ecology - waste materials        | Avoid release to the environment. Hazardous waste due to toxicity. |

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

<table>
<thead>
<tr>
<th>Transport document description</th>
<th>UN2811 Toxic, Solid, organic, n.o.s. (4-Dimethylaminopyridine) 6.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN-No. (DOT)</td>
<td>UN2811</td>
</tr>
<tr>
<td>Proper Shipping Name (DOT)</td>
<td>Toxic, Solid, organic, n.o.s.</td>
</tr>
<tr>
<td>Transport hazard class(es) (DOT)</td>
<td>6.1 - Class 6.1 - Poisonous materials</td>
</tr>
<tr>
<td>Hazard labels (DOT)</td>
<td>6.1 – Poison</td>
</tr>
</tbody>
</table>
SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

4-(Dimethylamino)pyridine is not on the REACH Candidate List

4-(Dimethylamino)pyridine is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed
Denmark

Classification remarks: Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation: Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent Bioaccumulative Toxic</td>
</tr>
<tr>
<td>ADR</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Road</td>
</tr>
<tr>
<td>ADN</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways</td>
</tr>
<tr>
<td>LD50</td>
<td>Median lethal dose</td>
</tr>
<tr>
<td>LC50</td>
<td>Median lethal concentration</td>
</tr>
<tr>
<td>NOAEC</td>
<td>No-Observed Adverse Effect Concentration</td>
</tr>
<tr>
<td>NOAEL</td>
<td>No-Observed Adverse Effect Level</td>
</tr>
<tr>
<td>NOEC</td>
<td>No-Observed Effect Concentration</td>
</tr>
<tr>
<td>RID</td>
<td>Regulations concerning the International Carriage of Dangerous Goods by Rail</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and Very Bioaccumulative</td>
</tr>
<tr>
<td>BCF</td>
<td>Bioconcentration factor</td>
</tr>
<tr>
<td>CLP</td>
<td>Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods</td>
</tr>
<tr>
<td>SDS</td>
<td>Safety Data Sheet</td>
</tr>
</tbody>
</table>


Other information: Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. Handle in accordance with good industrial hygiene and safety practices. The information on this sheet is not a specification and does not guarantee specific properties. The information is intended to provide general knowledge as to health and safety based upon our knowledge of handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instruction or recommendations are not followed. None.

Full text of H- and EUH-statements:

Acute Tox. 1 (Dermal) Acute toxicity (dermal) Category 1
<table>
<thead>
<tr>
<th>Property</th>
<th>Hazard Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 3 (Oral)</td>
<td>Acute toxicity (oral), Category 3</td>
</tr>
<tr>
<td>Aquatic Chronic 3</td>
<td>Hazardous to the aquatic environment — Chronic Hazard, Category 3</td>
</tr>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation, Category 2</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation Category 2</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity (single exposure) Category 3</td>
</tr>
<tr>
<td>H301</td>
<td>Toxic if swallowed</td>
</tr>
<tr>
<td>H310</td>
<td>Fatal in contact with skin</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.