Section 1 - Chemical Product and Company Identification

MSDS Name: 2-Bromopyridine, 99%
Catalog Numbers: AC107400000, AC107400250, AC107400500, AC107401000, AC107405000, CC04010DA, CC04010EA, CC04010EE
Synonyms: 2-Pyridyl bromide; o-Bromopyridine; beta-Bromopyridine; Pyridine, 2-bromo-
Company Identification: Acros Organics BVBA
Company Identification (USA) Acros Organics
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
One Reagent Lane
Fair Lawn, NJ 07410
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

Section 2 - Composition, Information on Ingredients

CAS#: 109-04-6
Chemical Name: 2-Bromopyridine
%: 99
EINECS#: 203-641-6

Hazard Symbols: T

Risk Phrases: 10 23/24/25 36

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Flammable liquid and vapor. Causes eye irritation. May be fatal if absorbed through the skin. May cause central nervous system depression. Harmful if inhaled or swallowed. May cause skin and respiratory tract irritation. Target Organs: Central nervous system.

Potential Health Effects

Eye: Causes eye irritation.
Skin: May cause skin irritation. May be fatal if absorbed through the skin. May cause cyanosis of the extremities.
Ingestion: Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Ingestion of large amounts may cause CNS depression.
Inhalation: Harmful if inhaled. May cause respiratory tract irritation. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. May cause burning sensation in the chest.
Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated eye contact may cause...
Chronic: conjunctivitis.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor.

Extinguishing Media:

- Autoignition Temperature: > 400 deg C (> 752.00 deg F)
- Flash Point: 54 deg C (129.20 deg F)
- Explosion Limits: Lower: Not available
- Explosion Limits: Upper: Not available
- NFPA Rating: health: 2; flammability: 2; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool. A vapor suppressing foam may be used to reduce vapors.

Section 7 - Handling and Storage

Handling: Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty Handling: containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame. Do not ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Bromopyridine</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: 2-Bromopyridine: None listed

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits
Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA’s 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: clear slight brown
Odor: None reported.
pH: Not available
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 192 - 194 deg C @ 760.00 mmHg
Freezing/Melting Point: Not available
Decomposition Temperature: Not available
Solubility in water: 2.5 g/l (20 c)
Specific Gravity/Density: 1.6570g/cm3
Molecular Formula: C5H4BrN
Molecular Weight: 158.00

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, ignition sources, excess heat.
Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, acid chlorides.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 109-04-6: US3850000
LD50/LC50: RTECS: Not available. Other: Dermal, rabbit: LD50 = 81.5 mg/kg., Oral, rat: LD50 = 92 mg/kg.
Carcinogenicity: 2-Bromopyridine - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: No information found.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: TOXIC LIQUIDS, FLAMMABLE, ORGANIC, N.O.S.
Hazard Class: 6.1
UN Number: UN2929
Packing Group: II
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:
Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

R 10 Flammable.
R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R 36 Irritating to eyes.

Safety Phrases:

S 9 Keep container in a well-ventilated place.
S 16 Keep away from sources of ignition - No smoking.
S 33 Take precautionary measures against static discharges.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 109-04-6: Not available

Canada

CAS# 109-04-6 is listed on Canada's NDSL List
Canadian WHMIS Classifications: B3, D2B
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS# 109-04-6 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 109-04-6 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 9/02/1997
Revision #7 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.