1. PRODUCT AND COMPANY IDENTIFICATION

Product name: 2-Bromopyridine
Product Number: B80100
Brand: Aldrich
Supplier: Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63110
USA
Telephone: +1 800-355-5832
Fax: +1 800-355-5502
Emergency Phone # (For both supplier and manufacturer): (314) 778-6555
Preparation Information: Sigma-Aldrich Corporation
Product Safety - Americas Region
1-800-251-8956

2. HAZARDS IDENTIFICATION

Emergency Overview
OSHA Hazards
Toxic by Ingestion, Highly toxic by skin absorption, Irritant

GHS Classification
Flammable liquids (Category 4)
Acute toxicity, Oral (Category 3)
Acute toxicity, Dermal (Category 2)
Skin irritation (Category 2)
Eye irritation (Category 5A)
Specific target organ toxicity - single exposure (Category 3)

GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)
H227 Combustible liquid
H314 Toxic if swallowed.
H315 Fatal if in contact with skin.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statement(s)
P281 Avoid breathing dust/ fumes / gas / mist/ vapours/ spray.
P310 Wear protective gloves/ protective clothing.
P302 + P352 IF ON SKIN: Gently wash with plenty of soap and water.
P305 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P311 Immediately call a POISON CENTER or doctor/ physician.

3. COMPOSITION INFORMATION ON INGREDIENTS

Formula: C2H5BrN
Molecular Weight: 158.09 g/mol
CAS-No.: EC-No.: Index-No.: Concentration
2-Bromopyridine
100.04-8 203-841-6 .

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If Inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Conditions of flammability
Not flammable or combustible.

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters
Wear self-contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen bromide gas

Further information
Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

SIGMA-ALDRICH
Material Safety Data Sheet
Version 4.2.1
Revision Date: 04/08/2011
Print Date: 10/15/2013
Personal precautions
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE
Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully reclosed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Contains no substances with occupational exposure limit values.

Personal protective equipment
Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection
Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin and body protection
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES
Appearance
Form: clear liquid
Colour: dark red

Safety data
pH: no data available
Melting point/freezing point: no data available
Boiling point: 192 - 194 °C (378 - 381 °F) • lit.
Flash point: no data available

Ignition temperature: > 400 °C (752 °F)
Autoignition temperature: no data available
Lower explosion limit: no data available
Upper explosion limit: no data available
Vapour pressure: no data available
Density: 1.657 g/cm3 at 25 °C (77 °F)
Water solubility: 20.2 g/l at 20 °C (68 °F)
Partition coefficient: n-octanol/water no data available
Relative vapour density: no data available
Odour: no data available
Odour threshold: no data available
Evaporation rate: no data available

10. STABILITY AND REACTIVITY
Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
no data available

Conditions to avoid
Heat, flames and sparks.

Materials to avoid
Strong oxidizing agents, Strong oxidizing agents, Strong acids, Acid chlorides

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions: Carbon oxides, nitrogen oxides (NOx), Hydrogen bromide gas

Other decomposition products: no data available

11. TOXICOLOGICAL INFORMATION
Acute toxicity
Oral LD50
LD50 Oral - rat: 92 mg/kg

Inhalation LC50
no data available

Dermal LD50
LD50 Dermal - rabbit: 82 mg/kg

Other Information on acute toxicity
no data available

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
no data available

Germ cell mutagenicity
no data available
Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Teratogenicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion Toxic if swallowed.

Skin May be fatal if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation.

Signs and Symptoms of Exposure

Burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects

no data available

Additional Information

RTECS: US3950050

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as used product.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 2810 Class: 6.1 Packing group II

Proper shipping name: Toxic, liquids, organic, n.o.s. (2-Bromopyridine)

Repacktable Quantity (RQ): Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN number: 2810 Class: 6.1 Packing group II EMS-No: F-A, S-A

Proper shipping name: TOXIC LIQUID, ORGANIC, N.O.S. (2-Bromopyridine)

Marine pollutant: No

IATA

UN number: 2810 Class: 6.1 Packing group II

Proper shipping name: Toxic liquid, organic n.o.s. (2 Bromopyridine)

15. REGULATORY INFORMATION

OSHA Hazards

Toxic by ingestion, Highly toxic to skin absorption, Irritant

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

2-Bromopyridine

CAS No. 109-04-6

New Jersey Right To Know Components

2-Bromopyridine

CAS No. 109-04-6

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Further Information

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