A MATERIAL SAFETY DATA SHEET
4-Bromo-2-Iodoaniline

1.1 Product Identifiers:

Product Name : 4-Bromo-2-Iodoaniline
CAS No : 66416-72-6

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

Identified uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Supplier: Infinium Pharmachem Pvt. Ltd. (AN ISO 9001:2008 CERTIFIED CO.)
38, G.I.D.C., Sojitra
Dist.: ANAND
Gujarat, India

Tel : 0091-2697-234987
Fax : 0091-2697-234987
Email : info@infiniumpharmachem.com

Synonyms : ASISCHEM T54343; 4-Bromo-2-Iodoaniline; 4-Bromo-2-Iodoaniline, 97%; 4-Bromo-2-Iodoaniline, 97%; Benzenamine, 4-bromo-2-iodo-

CAS No. : 66416-72-6
Molecular Weight : 297.92 g/mol
Chemical Formula : C₆H₅BrIN
3.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]**

- Acute toxicity, Oral (Category 3)
- Skin irritation (Category 2)
- Serious eye damage (Category 1)
- Specific target organ toxicity - single exposure (Category 3)
- Chronic aquatic toxicity (Category 2)

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

Toxic if swallowed. Irritating to respiratory system and skin. Risk of serious damage to eyes. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3.2 Label elements

**Labeling according Regulation (EC) No 1272/2008**

![Pictogram]

- **Signal word**: Danger
- **Hazard statement(s)**
  - H301: Toxic if swallowed.
  - H315: Causes skin irritation.
  - H318: Causes serious eye damage.
  - H335: May cause respiratory irritation.
  - H411: Toxic to aquatic life with long lasting effects.
- **Precautionary statement(s)**
  - P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
  - P273: Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard None

Statements


Hazard symbol(s)

R-phrase(s)

R25 Toxic if swallowed.

R37/38 Irritating to respiratory system and skin.

R41 Risk of serious damage to eyes.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S45 Wear suitable protective clothing, gloves and eye/face protection. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.
3.3 Other hazards
none

4.1 Description of first aid measures
General Advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

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. 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
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most Important symptoms & efforts, both acute and delayed
Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

4.3 Indication of any immediate medical attention and special treatment needed
No data available

5.1 Extinguishing Media:
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Carbon oxides, nitrogen oxides (NOx), Hydrogen bromide gas, Hydrogen iodide

5.3 Advice for firefighters
Wear self contained breathing apparatus for fighting if necessary.
5.4 Further Information

No data available.

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7.1 Precautions for safe Handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

7.2 Conditions for safe Storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end uses
no data available

8.1 Control parameters

Components with workplace control Parameters.
8.2 Exposure Controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face 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 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**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.

**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 backupto 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).

9.1 Information on Basic physical & chemical properties

a) Appearance  
Form: solid

b) Odor  
no data available

c) Odor Threshold  
no data available

d) pH  
no data available

e) Melting point/freezing Point  
Melting point/range: 69-72 °C - lit

f) Initial boiling point and  
no data available
Boiling range

g) Flash point  no data available

h) Evaporation rate  no data available

i) Flammability (solid, gas)  no data available

j) Upper/lower
   Flammability or explosive limits  no data available

k) Vapor pressure  no data available

l) Vapor density  no data available

m) Relative density  no data available

n) Water solubility  no data available

o) Partition coefficient: n-octanol /water  no data available

p) Auto ignition  no data available

Temperature

q) Decomposition  no data available

Temperature

r) Viscosity  no data available

s) Explosive properties  no data available

t) Oxidizing properties  no data available

9.2 Other safety Information

no data available

10.1 Reactivity

no data available

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong oxidizing agents agents

10.6 Hazardous decomposition products

Other decomposition products - no data available
11.1 Information on toxicological effects

Acute toxicity
no data available

Skin corrosion/irritation
no data available.

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity
no data available

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

Reproductive toxicity
no data available

Specific target organ toxicity - single exposure
Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure
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 harmful if absorbed through skin. Causes skin irritation.

Eyes  
Causes eye burns.

Signs and Symptoms of Exposure

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

Additional Information

RTECS: Not available

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

Toxic to aquatic life with long lasting effects

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. 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 unused product.
14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: - 2811  
IMDG: - 2811  
IATA: - 2811

14.2 UN proper shipping name
ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (4-Bromo-2-iodoaniline)
IMDG: TOXIC SOLID, ORGANIC, N.O.S. (4-Bromo-2-iodoaniline)
IATA: Toxic solid, organic, n.o.s. (4-Bromo-2-iodoaniline)

14.3 Transport hazard class (es)
ADR/RID: 6.1  
IMDG: 6.1  
IATA: 6.1

14.4 Packaging group
ADR/RID: III  
IMDG: III  
IATA: III

14.5 Environmental hazards
ADR/RID: yes  
IMDG Marine pollutant: yes  
IATA: yes

14.6 Special precautions for user
no data available

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
no data available

15.2 Chemical Safety Assessment
no data available

MSDS Creation Date: 01-01-2015
Revision #1 Date: 31-12-2017

Disclaimer:
The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability 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 Infinium Pharmachem Pvt Ltd 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 Infinium Pharmachem Pvt Ltd has been advised of the possibility of such damages.