

**Revision number:** 1 Revision date: 07/06/2018

### **1. IDENTIFICATION**

Product name: Product code:

Product use: **Restrictions on use:** 

Company: TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TClebomicale.co

# 2

| sales-US@TCIchemicals.com<br>www.TCIchemicals.com | Environmental Health Safety and Security<br>+1- 503-286-7624  |
|---|---|
| 2. HAZARD(S) IDENTIFICATION                       |   |
| OSHA Haz Com: CFR 1910.1200:<br>WHMIS 2015:       | Acute Toxicity - Oral [Category 4]<br>Acute Toxicity - Dermal [Category 4]<br>Acute Toxicity - Inhalation [Category 4]<br>Skin Corrosion/Irritation [Category 2]<br>Eye Damage/Irritation [Category 2A]   |
| Signal word:                                      | Warning!  |
| Hazard Statement(s):                              | Harmful if swallowed, in contact with skin or if inhaled<br>Causes skin irritation<br>Causes serious eye irritation   |
| Pictogram(s) or Symbol(s):                        |   |
| Precautionary Statement(s):<br>[Prevention]       | Avoid breathing dust, fume, mist, vapors or spray. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wea protective gloves, protective clothing, eye protection.   |
| [Response]  | If swallowed: Call a poison center or doctor if you feel unwell. Rinse mouth. If on skin: Wash with plent<br>of soap and water. Call a poison center or doctor if you feel unwell. Take off contaminated clothing and<br>wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a<br>poison center or doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes.<br>Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get |

medical advice or attention. Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40 CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified: [HNOC]

None.

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Emergency telephone number:

Transportation Emergencies:

+1-703-527-3887 (International)

**Responsible department:** 

TCI America (8:00am - 5:00pm) PST

Chemical Emergencies:

+1-503-286-7624

Chemtrec 24-Hour +1-800-424-9300 (U.S.A.)

TCI America

4-Bromo-2,5-difluoronitrobenzene B3926

**TCI AMERICA** 

SAFETY DATA SHEET

For laboratory research purposes. Not for drug or household use.



[Disposal]

### **TCI AMERICA**

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Substance/mixture: | Substance<br>4-Bromo-2.5-difluoronitrobenzene                  |  |
|--------------------|--|--|
| Components:        |  |  |
| Percent:           | >98.0%(GC)   |  |
| CAS RN:            | 167415-27-2  |  |
| Molecular Weight:  | 237.99   |  |
| Chemical Formula:  | C <sub>6</sub> H <sub>2</sub> BrF <sub>2</sub> NO <sub>2</sub> |  |
| Synonyms:          | 1-Bromo-2,5-difluoro-4-nitrobenzene                            |  |
|                    |  |  |

# 4. FIRST-AID MEASURES

| Description of first aid measures | S   |
|-----------------------------------|---|
| Inhalation:                       | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.                                 |
| Skin contact:                     | Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation<br>or rash occurs: Get medical advice/attention.                          |
| Eye contact:                      | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.<br>Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| Ingestion:                        | Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.   |
| Symptoms/effects:                 |   |
| Acute:                            | Redness.  |
| Delayed:                          | No data available   |
| Indication of any immediate med   | dical attention:  |
| Not available.                    |   |
| Notes to physician:               |   |
| No data available                 |   |

## 5. FIRE-FIGHTING MEASURES

| Suitable extinguishing media:                             | Dry chemical, foam, water spray, carbon dioxide.   |
|---|--|
| Specific hazards arising from the<br>chemical:            | Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.                          |
| Hazardous combustion products:<br>Other specific hazards: | These products include: Carbon oxides Halogenated compounds<br>WARNING: Highly toxic HF gas is produced during combustion. |
| Advice for firefighters:                                  | Wear self-contained breathing apparatus if possible.   |

### 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protective<br>equipment and emergency procedures:<br>Environmental precautions:<br>Methods and materials for containment<br>and cleaning up: | Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc. Prevent product from entering drains. Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. |
|--|---|
| 7. HANDLING AND STORAGE  |   |
| Precautions for safe handling:   | Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing.  |
| Conditions for safe storage, including a   | ny incompatibilities  |
| Storage conditions:  | Keep container tightly closed. Store in a cool and dark place.<br>Store away from incompatible materials such as oxidizing agents.  |
| Packaging material:  | Comply with laws.   |

**TCI AMERICA** 

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Appropriate engineering controls: | Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. |
|-----------------------------------|---|
| Personal protective equipment     |   |
| Respiratory protection:           | Dust respirator. Follow local and national regulations.   |
| Hand protection:                  | Protective gloves.  |
| Eye protection:                   | Safety glasses. A face-shield, if the situation requires.   |
| Skin and body protection:         | Protective clothing. Protective boots, if the situation requires.   |

### 9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical state (20°C):<br>Form:<br>Colour:<br>Odour:<br>Odor threshold:<br>Odour threshold: | Solid<br>Crystal - Powder<br>Slightly pale yellow - Yellow<br>No data available<br>No data available<br>No data available | u  |                    |
|---|---|--|--------------------|
| Melting point/freezing point:   | 58°C (136°F)  | pH:  | No data available  |
| Boiling point/range:  | No data available   | Vapour pressure:   | No data available. |
| Decomposition temperature:  | No data available   | Vapour density:  | No data available  |
| Relative density:   | No data available   | Dynamic Viscosity:   | No data available  |
| Kinematic viscosity:  | No data available   |  |                    |
| Log Pow:  | No data available   | Evaporation rate(Butyl<br>Acetate=1):                          | No data available  |
| Flash point:<br>Flammability(solid, gas):   | No data available<br>No data available  | Autoignition temperature:<br>Flammability or explosive limits: | No data available  |
|   |   | Lower:   | No data available  |
|   |   | Upper:   | No data available  |
| Solubility(ies):<br>[Water]<br>[Other solvents]   | No data available<br>No data available  |  |                    |

10. STABILITY AND REACTIVITY

Reactivity:No data availableChemical stability:Stable under proper conditions.Possibility of hazardous reactions:No special reactivity has been reported.Incompatible materials:Oxidizing agentsHazardous decomposition products:Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Hydrogen fluoride, Hydrogen bromide

### 11. TOXICOLOGICAL INFORMATION

| Acute Toxicity:<br>No data available  |   |   |   |  |
|---|---|---|---|--|
| Skin corrosion/irritation:<br>No data available                                     |   |   |   |  |
| Serious eye damage/irritation:<br>No data available                                 |   |   |   |  |
| Respiratory or skin sensitization:<br>No data available                             |   |   |   |  |
| Germ cell mutagenicity:<br>No data available  |   |   |   |  |
| Carcinogenicity:<br>No data available   |   |   |   |  |
| IARC: No data available   | NTP:  | No data available   | OSHA:   | No data available  |
| Reproductive toxicity:<br>No data available   |   |   |   |  |
| Target organ(s):  | No data available   |   |   |  |
| 12. ECOLOGICAL INFORMATION  |   |   |   |  |
| Ecotoxicity:  |   |   |   |  |
| Fish:   | No data available   |   |   |  |
| Crustacea:  | No data available   |   |   |  |
| Algae:  | No data available   |   |   |  |
| Persistence / degradability:<br>Bioaccumulative potential(BCF):<br>Mobility in soil | No data available<br>No data available  |   |   |  |
| Log Pow:  | No data available   |   |   |  |
| Soil adsorption (Koc):  | No data available   |   |   |  |
| Henry's Law (PaM ³/mol):  | No data available   |   |   |  |
| 13. DISPOSAL CONSIDERATIONS   |   |   |   |  |
| Disposal of product:<br>Disposal of container:                                      | Local rules and re<br>and burn in a cher<br>intended to provid<br>with this section er<br>Identification and I<br>be allowed to ente<br>Dispose of as unu | nical incinerator equipped with a<br>e assistance but does not replac<br>nsure regulatory compliance acc<br>Listing of Hazardous Waste are<br>er the environment, drains, water<br>sed product. Do not re-use emp | issolve or mix ma<br>an afterburner and<br>ce these laws, no<br>cording to the law<br>listed in 40 CFR<br>r ways, or the soil<br>ty containers. | terial with a combustible solvent<br>d scrubber system. This section is<br>r does compliance in accordance<br>. US EPA guidelines for<br>Parts 261. The product should not |
| Other considerations:   | Observe all federa  | al, state and local regulations wh  | nen disposing of th   | ne substance.  |
| 14. TRANSPORT INFORMATION   |   |   |   |  |
| DOT (US)  | Non-hazardous fo  | r transportation.   |   |  |
| IATA  | Non-hazardous fo  | r transportation.   |   |  |
| IMDG  | Non-hazardous fo  | r transportation.   |   |  |

### 15. REGULATORY INFORMATION

#### Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.

(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

#### **US Federal Regulations**

CERCLA Hazardous substance and Reportable Quantity: SARA 313: Not Listed SARA 302: Not Listed

| Not Listed |
|------------|
| Not Listed |
| Not Listed |
| Not Listed |
|            |

#### Other Information

NFPA Rating: Health: 2 Flammability: 0 Instability: 0

### HMIS Classification: Health: 2 Flammability: 0 Physical: 0

#### International Inventories

#### 16. OTHER INFORMATION

#### Revision date: 07/06/2018

#### **Revision number:** 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.