

Safety Data Sheet 2621B06 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 12/31/2015 Version: 1.0

| SECTION 4. Identification | | | |
|--|--|--|--|
| SECTION 1: Identification | | | |
| 1.1. Identification | | | |
| Product form | : Substance | | |
| Substance name | : 2-Bromo-3-fluorobenzoic acid | | |
| CAS No | : 132715-69-6 | | |
| Product code | : 2621-B-06 | | |
| Formula | : C7H4BrFO2 | | |
| Other means of identification | : MFCD01569398 | | |
| 1.2. Relevant identified uses of the subs | stance or mixture and uses advised against | | |
| Use of the substance/mixture | : Laboratory chemicals Manufacture of substances Scientific research and development | | |
| 1.3. Details of the supplier of the safety | data sheet | | |
| SynQuest Laboratories, Inc. P.O. Box 309 Alachua, FL 32615 - United States of America T (386) 462-0788 - F (386) 462-7097 info@synquestlabs.com - www.synquestlabs.com | <u>n</u> | | |
| 1.4. Emergency telephone number | | | |
| Emergency number | : (844) 523-4086 (3E Company - Account 10069) | | |
| SECTION 2: Hazard(s) identification | | | |
| 2.1. Classification of the substance or n | | | |
| | IIXUIC | | |
| Classification (GHS-US) | | | |
| Skin Irrit. 2 H315 - Causes skin irritation Eye Irrit. 2A H319 - Causes serious eye irrita | tion | | |
| STOT SE 3 H335 - May cause respiratory irr | | | |
| | | | |
| Full text of H-phrases: see section 16 | | | |
| Full text of H-phrases: see section 16 | | | |
| Full text of H-phrases: see section 16 2.2. Label elements | | | |
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| 2.2. Label elements GHS-US labeling | | | |
| 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) | : CHS07 : Warning | | |
| 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) | : Warning | | |
| 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) | Warning H315 - Causes skin irritation H319 - Causes serious eye irritation | | |
| 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US) | Warning H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation | | |
| 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) | Warning H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation P261 - Avoid breathing dust, mist, spray | | |
| 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US) | Warning H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation | | |
| 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US) | Warning H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation P261 - Avoid breathing dust, mist, spray P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection | | |
| 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US) | Warning H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation P261 - Avoid breathing dust, mist, spray P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water | | |
| 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US) | Warning H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation P261 - Avoid breathing dust, mist, spray P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing | | |
| 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US) | Warning H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation P261 - Avoid breathing dust, mist, spray P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing | | |
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| 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US) | Warning H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation P261 - Avoid breathing dust, mist, spray P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P312 - Call a POISON CENTER or doctor/physician if you feel unwell P321 - Specific treatment (see supplemental first aid instructions on this label) | | |
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| 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US) | Warning H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation P261 - Avoid breathing dust, mist, spray P264 - Wash skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P312 - Call a POISON CENTER or doctor/physician if you feel unwell P321 - Specific treatment (see supplemental first aid instructions on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P403+P233 - Store in a well-ventilated place. Keep container tightly closed | | |

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|--|-------------------|---|---------------|--------------------|---|----------|
| 2.3. Other hazards No additional information available | | | | | | |
| 2.4. Unknown acute toxicity (GHS U | S) | | | | | |
| Not applicable | , | | | | | |
| SECTION 3: Composition/information | ation on in | aradiante | | | | |
| 3.1. Substance | | greatents | | | | |
| Substance type | · Mono | -constituent | | | | |
| | | | 1 | 0/ | Classification (CUC U | |
| Name 2-Bromo-3-fluorobenzoic acid | | Product identifier (CAS No) 132715-69-6 | | % <= 100 | Classification (GHS-US Skin Irrit. 2, H315 | >) |
| (Main constituent) | | | | L = 100 | Eye Irrit. 2A, H319 STOT SE 3, H335 | |
| Full text of H-phrases: see section 16 | | | | | 3101 3L 3, 11333 | |
| 3.2. Mixture | | | | | | |
| Not applicable | | | | | | |
| SECTION 4: First aid measures | | | | | | |
| 4.1. Description of first aid measure | S | | | | | |
| First-aid measures general | | se of accident or if you feel un possible). Move the affected | | | | el |
| First-aid measures after inhalation | | ove person to fresh air and ke ation. Get medical advice/atte | | ble for breathin | ng. If not breathing, give ar | tificial |
| First-aid measures after skin contact | | with plenty of soap and wate | | | | |
| First-aid measures after eye contact | prese | diately flush eyes thoroughly nt and easy to do. Continue r | insing. Get | medical advice | /attention. | |
| First-aid measures after ingestion | | OT induce vomiting. Never given out with water. Get medical | | | unconscious person. Rins | se |
| 4.2. Most important symptoms and | effects, both | acute and delayed | | | | |
| Symptoms/injuries | | nost important known sympto ind/or in section 11. | ms and effe | cts are describ | ed in the labelling (see sec | ction |
| 4.3. Indication of any immediate me | dical attentio | n and special treatment nee | eded | | | |
| Treat symptomatically. | | | | | | |
| SECTION 5: Firefighting measure | es | | | | | |
| 5.1. Extinguishing media | | | | | | |
| Suitable extinguishing media | | ol resistant foam. Carbon dio priate for surrounding fire. | xide. Dry po | wder. Water s | oray. Use extinguishing me | edia |
| 5.2. Special hazards arising from the | e substance o | or mixture | | | | |
| Fire hazard | : Thern | nal decomposition generates: | Carbon oxi | des. Hydrogen | bromide. Hydrogen fluorid | le. |
| 5.3. Advice for firefighters | | | | | | |
| Firefighting instructions | : In cas | se of fire: Evacuate area. | | | | |
| Protection during firefighting | | gas tight chemically protective atus. For further information | | | | |
| SECTION 6: Accidental release n | | | | | | |
| 6.1. Personal precautions, protectiv | | | | | ation. Do not have the state | |
| General measures | : Evacu | uate unnecessary personnel. | Ensure ade | quate air ventil | ation. Do not breathe dust. | |
| 6.1.1. For non-emergency personnel | | | | | | |
| Emergency procedures | : Only | qualified personnel equipped | with suitable | e protective eq | uipment may intervene. | |
| 6.1.2. For emergency responders | | | | | | |
| Protective equipment | | ot attempt to take action witho to section 8: "Exposure contro | | | oment. For further informat | ion |
| 6.2. Environmental precautions | | | | | | |
| Avoid release to the environment. Notify aut | thorities if prod | luct enters sewers or public w | aters. | | | |
| 6.3. Methods and material for contain | inment and cl | leaning up | | | | |
| For containment | | leak if safe to do so. | | | | |
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| : Sweep or shovel spills into appropriate container for disposal. Minimize generation of dust. | | |
|--|--|--|
| : For disposal of solid materials or residues refer to section 13 : "Disposal considerations". | | |
| | | |
| | | |
| • | | |
| | | |
| Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Do not breathe dust, mist, spray. Wear personal protective equipment. Avoid contact with skin and eyes. | | |
| : Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. | | |
| | | |

| Technical measures | : Comply with applicable regulations. |
|------------------------|--|
| Storage conditions | : Keep container closed when not in use. |
| Incompatible materials | : Refer to Section 10 on Incompatible Materials. |
| Storage area | : Store in dry, cool, well-ventilated area. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

| 8.2. Exposure controls | |
|----------------------------------|---|
| Appropriate engineering controls | : Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. |
| Hand protection | : Protective gloves. 29 CFR 1910.138: Hand Protection. |
| Eye protection | : Chemical goggles or safety glasses. Face shield. 29 CFR 1910.133: Eye and Face Protection. |
| Skin and body protection | : Wear suitable protective clothing. |
| Respiratory protection | : In case of inadequate ventilation wear respiratory protection. 29 CFR 1910.134: Respiratory Protection. |
| Other information | : Safety shoes. 29 CFR 1910.136: Foot Protection. |

SECTION 9: Physical and chemical properties

| 9.1. Information on basic physical an | d chemical properties |
|---|-----------------------|
| Physical state | : Solid |
| Color | : No data available |
| Odor | : No data available |
| Odor threshold | : No data available |
| рН | : No data available |
| Melting point | : 156.4 - 159.1 °C |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : > 110 °C |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : No data available |
| Explosion limits | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |
| Vapor pressure | : No data available |
| Relative density | : No data available |
| Relative vapor density at 20 °C | : No data available |
| Molecular mass | : 219.01 g/mol |
| Solubility | : No data available |
| Log Pow | : No data available |

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| Auto-ignition temperature | : No data available |
|---|---|
| Decomposition temperature | : No data available |
| Viscosity | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| 9.2. Other information | |
| No additional information available | |
| SECTION 10: Stability and r | reactivity |
| 10.1. Reactivity | |
| No additional information available | |
| 10.2. Chemical stability | |
| The product is stable at normal hand | ling and storage conditions. |
| 10.3. Possibility of hazardous | reactions |
| No additional information available | |
| 10.4. Conditions to avoid | |
| Keep away from heat, sparks and fla | me. |
| 10.5. Incompatible materials | |
| Strong oxidizing agents. | |
| 10.6. Hazardous decompositio | n products |
| Under normal conditions of storage a fire, see Section 5. | and use, hazardous decomposition products should not be produced. Hazardous decomposition products in case of |
| SECTION 11: Toxicological | information |
| 11.1. Information on toxicolog | ical effects |
| | |
| Acute toxicity | · Not classified |

| Acute toxicity | : Not classified |
|--|-------------------------------------|
| Skin corrosion/irritation | : Causes skin irritation. |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity (single exposure) | : May cause respiratory irritation. |
| Specific target organ toxicity (repeated exposure) | : Not classified |
| Aspiration hazard | : Not classified |

| SECT | ION 12: Ecological information |
|---------|--------------------------------|
| 12.1. | Toxicity |
| No addi | tional information available |
| 12.2. | Persistence and degradability |
| No addi | tional information available |
| 12.3. | Bioaccumulative potential |
| No addi | tional information available |
| 12.4. | Mobility in soil |
| No addi | tional information available |
| 12.5. | Other adverse effects |
| No addi | tional information available |

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| SECTION 13: Disposal considerations | | | |
|-------------------------------------|---|--|--|
| 13.1. Waste treatment methods | | | |
| Waste treatment methods | : Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber. | | |
| Waste disposal recommendations | : Dispose of contents/container in accordance with licensed collector's sorting instructions. | | |
| Additional information | : Recycle the material as far as possible. | | |

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

| 2-Bromo-3-fluorobenzoic acid | CAS No 132715-69-6 | 100% |
|------------------------------|--------------------|------|
| | | |

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

Full text of H-phrases:

| Eye Irrit. 2A | Serious eye damage/eye irritation Category 2A |
|---------------|---|
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H335 | May cause respiratory irritation |

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| NFPA health hazard | : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given. |
|--------------------|---|
| NFPA fire hazard | : 0 - Materials that will not burn. |
| NFPA reactivity | : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water. |
| HMIS III Rating | |
| Health | : 2 Moderate Hazard - Temporary or minor injury may occur |
| Flammability | : 0 Minimal Hazard - Materials that will not burn |
| Physical | : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives. |

SDS US (GHS HazCom 2012)

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is offered solely for your consideration, investigation, and verification. It does not represent any guarantee of the properties of the product nor that the hazard precautions or procedures described are the only ones which exist. SynQuest shall not be held liable or any damage resulting from handling or from contact with the above product.