

SAFETY DATA SHEET

Revision Date 01-September-2023 Revision Number 3

1. Identification

Product Name 2-Bromo-5-fluorophenyl isothiocyanate

Cat No.: SB01713DA; SB01713DE; SB01713EA; SB01713EB; SB01713ZZ

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Importer/Distributor Fisher Scientific One Reagent Lane 112 Colonnade Road, Fair Lawn, NJ 07410 Ottawa. ON K2E 7L6.

Canada

Tel: 1-800-234-7437

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Acute oral toxicity
Category 4
Acute dermal toxicity
Category 4
Acute Inhalation Toxicity
Category 4
Skin Corrosion/Irritation
Category 2
Serious Eye Damage/Eye Irritation
Category 2
Specific target organ toxicity (single exposure)
Category 3

Target Organs - Respiratory system.

Label Elements

Hazard Statements

Signal Word Warning

Harmful if swallowed, in contact with skin or if inhaled

Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation



Precautionary Statements

Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Wear protective gloves/protective clothing/eye protection/face protection

Response

IF ON SKIN: Wash with plenty of soap and water

IF INHALED: Remove person to fresh air and keep comfortable for breathing

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Call a POISON CENTER/ doctor if you feel unwell

Rinse mouth

Take off contaminated clothing and wash it before reuse

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

3. Composition/Information on Ingredients

	Component	CAS-No	Weight %
Ī	2-Bromo-5-fluorophenyl isothiocyanate	175205-35-3	100

4. First-aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms/effects

Notes to Physician

None reasonably foreseeable.

Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO₂). Dry chemical. Chemical foam.

No information available

Unsuitable Extinguishing Media No information available

Flash Point No information available No information available

Autoignition Temperature

Explosion Limits

UpperNo data availableLowerNo data available

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen halides. Sulfur oxides. Gaseous hydrogen fluoride (HF). Fluorine. Bromine.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
2	1	0	N/A

6. Accidental release measures

Personal Precautions
Environmental Precautions

Ensure adequate ventilation. Use personal protective equipment as required. Should not be released into the environment. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. **Up**

	7. Handling and storage
Handling	Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.
Storage.	Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible Materials. Strong oxidizing agents. Strong acids. Strong bases. Alcohols. Amines. Strong reducing agents.

8. Exposure controls / personal protection

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection Goggles

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	Glove comments
Nitrile rubber	See manufacturers	-	Splash protection only
Neoprene	recommendations		
Natural rubber			
PVC			

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly **Recommended Filter type:** Organic gases and vapours filter Type A Brown conforming to EN14387

When RPE is used a face piece Fit Test should be conducted

Environmental exposure controls

No information available.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

9. Physical and chemical properties

Physical State Liquid Appearance Light cream

Odor

Odor Threshold
PH

No information available
No information available
No information available
No information available
No data available
No information available
No information available

Boiling Point/Range
No information available
Flash Point
Evaporation Rate
No information available
No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

Upper No data available
Lower No data available
Vapor Pressure No information available
Vapor Density No information available
Specific Gravity No information available
Solubility No information available
Partition coefficient; n-octanol/water No data available

Autoignition Temperature No information available

Decomposition Temperature

No information available

No information available

Molecular Formula C7 H3 Br F N S

Molecular Weight 232.08

10. Stability and reactivity

2-Bromo-5-fluorophenyl isothiocyanate

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Strong oxidizing agents, Strong acids, Strong bases, Alcohols, Amines, Strong reducing **Incompatible Materials**

agents

Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen halides,

Sulfur oxides, Gaseous hydrogen fluoride (HF), Fluorine, Bromine

Hazardous Polymerization No information available.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information Component Information

Toxicologically Synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

No information available Irritation

Sensitization No information available

The table below indicates whether each agency has listed any ingredient as a carcinogen. Carcinogenicity

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
2-Bromo-5-fluorophen	175205-35-3	Not listed				
vl isothiocvanate			1			

Mutagenic Effects No information available

No information available. **Reproductive Effects**

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and No information available

delayed

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

2-Bromo-5-fluorophenyl isothiocyanate

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No UN2811

Proper Shipping Name TOXIC SOLIDS, ORGANIC, N.O.S.

Hazard Class 6.1
Packing Group

TDG

UN-No UN2811

Proper Shipping Name Toxic solid, organic, n.o.s.

Hazard Class 6.1 Packing Group III

IATA

UN-No UN2811

Proper Shipping Name Toxic solid, organic, n.o.s.

Hazard Class 6.1 Packing Group III

IMDG/IMO

UN-No UN2811

Proper Shipping Name Toxic solid, organic, n.o.s.

Hazard Class 6.1 Packing Group III

15. Regulatory information

International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
2-Bromo-5-fluorophenyl isothiocyanate	175205-35-3	-	-	-	-	-	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
2-Bromo-5-fluorophenyl	175205-35-3	-	-	-	-	-	-	-	-
isothiocyanate									

Leaend:

X - Listed '-' - Not Listed

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

Other International Regulations

Authorisation/Restrictions according to EU REACH

Not applicable

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS-No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
2-Bromo-5-fluorophenyl isothiocyanate	175205-35-3	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS-No	Seveso III Directive	Seveso III Directive	Rotterdam	Basel Convention
Component	CAS-NO	(2012/18/EC) -	(2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Convention (PIC)	(Hazardous Waste)

16. Other information

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Revision SummaryThis document has been updated to comply with the requirements of WHMIS 2015 to align

with the Globally Harmonised System (GHS) for the Classification and Labelling of

Chemicals.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS