

# SAFETY DATA SHEET

Creation Date 23-Mar-2012 Revision Date 14-Feb-2020 Revision Number 2

# 1. Identification

Product Name 1-Bromo-2-fluorobenzene

Cat No.: A10635

**CAS-No** 1072-85-1

Synonyms 1-Bromo-2-fluorobenzene

Recommended Use Laboratory chemicals.

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

Details of the supplier of the safety data sheet

### Company

Alfa Aesar

Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757 **Email:** tech@alfa.com

www.alfa.com

## **Emergency Telephone Number**

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.

After normal business hours, call Carechem 24 at (866) 928-0789.

# 2. Hazard(s) identification

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids

Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

Specific target organ toxicity (single exposure)

Category 2

Category 2

Category 3

Target Organs - Respiratory system.

# Label Elements

## **Signal Word**

Warning

## **Hazard Statements**

Flammable liquid and vapor Causes skin irritation Causes serious eye irritation May cause respiratory irritation



### **Precautionary Statements**

### Prevention

Wash face, hands and any exposed skin thoroughly after handling

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

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

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

### Inhalation

IF INHALED: 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

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

#### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eve irritation persists: Get medical advice/attention

#### Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

### **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

# Hazards not otherwise classified (HNOC)

None identified

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %		
1-Fluoro-2-bromobenzene	1072-85-1	>95		

## 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** Get medical attention. Wash off immediately with plenty of water for at least 15 minutes.

#### 1-Bromo-2-fluorobenzene

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

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

Most important symptoms and

effects

Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting
Treat symptomatically

Notes to Physician

# 5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may

be used to cool closed containers.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire

**Flash Point** 43 °C / 109.4 °F

Method - No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

### **Specific Hazards Arising from the Chemical**

Flammable. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air.

### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen halides. Gaseous hydrogen fluoride (HF).

### **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.

<u>NFPA</u>

Health	Flammability	Instability	Physical hazards
2	2	0	N/A

## 6. Accidental release measures

Personal Precautions Use personal protective equipment as required. Ensure adequate ventilation. Remove all

sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions 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**Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

	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. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Flammables area.

#### 1-Bromo-2-fluorobenzene

## 8. Exposure controls / personal protection

**Exposure Guidelines** 

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

Engineering Measures Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations

and safety showers are close to the workstation location. Ensure adequate ventilation,

especially in confined areas.

Personal Protective Equipment

**Eye/face Protection** Tight sealing safety goggles. Face protection shield.

**Skin and body protection**Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection 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.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

# 9. Physical and chemical properties

Physical State Liquid
Appearance Clear
Odor Odorless

Odor ThresholdNo information availablepHNo information availableMelting Point/RangeNo data available

**Boiling Point/Range** 155 - 157 °C / 311 - 314.6 °F @ 760 mmHg

Flash Point 43 °C / 109.4 °F
Evaporation Rate No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor Density 6.0

Specific Gravity 1.600

Solubility
Partition coefficient; n-octanol/water
Autoignition Temperature
Decomposition Temperature
Viscosity
Insoluble in water
No data available
No information available
No information available
No information available

Molecular Formula C6 H4 Br F

Molecular Weight 175

## 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat. Keep away from open flames, hot surfaces and

sources of ignition.

Incompatible Materials Strong oxidizing agents, Strong acids, Strong bases

#### 1-Bromo-2-fluorobenzene

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen halides, Gaseous hydrogen

fluoride (HF)

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

# 11. Toxicological information

**Acute Toxicity** 

Product Information

No acute toxicity information is available for this product

Component Information Toxicologically Synergistic

No information available

**Products** 

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

Irritation No information available

Sensitization No information available

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
1-Fluoro-2-bromobenz	1072-85-1	Not listed				
ene						

Mutagenic Effects No information available

**Reproductive Effects** No information available.

**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 Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

delayed

**Endocrine Disruptor Information** No information available

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

## 12. Ecological information

**Ecotoxicity** 

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Do not empty into drains.

Persistence and Degradability Persistence is unlikely

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Is not likely mobile in the environment due its low water solubility.

Component	log Pow		
1-Fluoro-2-bromobenzene	3.08		

#### 1-Bromo-2-fluorobenzene

# 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** UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3
Packing Group III

TDG

**UN-No** UN1993

**Proper Shipping Name** Flammable liquid, n.o.s.

Hazard Class 3
Packing Group III

<u>IATA</u>

**UN-No** UN1993

**Proper Shipping Name** Flammable liquid, n.o.s.

Hazard Class 3
Packing Group III

IMDG/IMO

**UN-No** UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3
Packing Group III

# 15. Regulatory information

### United States of America Inventory

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags	
			Active/mactive	i iaga	
1-Fluoro-2-bromobenzene	1072-85-1	X	ACTIVE	-	

### Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

## **International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
1-Fluoro-2-bromobenzene	1072-85-1	-	Х	214-018-3	X	-	-	Х	-

## U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and Not applicable

Revision Date 14-Feb-2020 1-Bromo-2-fluorobenzene

Health Administration

**CERCLA** Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

Not applicable

U.S. State Right-to-Know

Regulations

**U.S.** Department of Transportation

Reportable Quantity (RQ): Ν **DOT Marine Pollutant** Ν **DOT Severe Marine Pollutant** Ν

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Moderate risk, Grade 2 **Mexico - Grade** 

## 16. Other information

Health, Safety and Environmental Department **Prepared By** 

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23-Mar-2012 **Creation Date Revision Date** 14-Feb-2020 14-Feb-2020 **Print Date** 

**Revision Summary** SDS authoring systems update, replaces ChemGes SDS No. 1072-85-1/2.

#### **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**