# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

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Revision Date 25-Aug-2023
Version 2

MAYRF00407

# 2-Bromo-5-methoxybenzene-1-carbonyl chloride

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明: 2-Bromo-5-methoxybenzene-1-carbonyl chloride Product Description: 2-Bromo-5-methoxybenzene-1-carbonyl chloride

Cat No. : RF00407DA; RF00407EA; RF00407ZZ

Molecular Formula C8 H6 Br Cl O2

Supplier UK entity/business name

Thermo Fisher Scientific (Heysham),

Shore Road,

Port of Heysham Industrial Park, Heysham, Lancashire, LA3 2XY

United Kingdom

**EU entity/business name** Thermo Fisher Scientific Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

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

E-mail address begel.sdsdesk@thermofisher.com

Recommended Use Laboratory chemicals.
Uses advised against No Information available

## **SECTION 2. HAZARD IDENTIFICATION**

Physical StateAppearanceOdorLiquidLight yellowNo information available

**Emergency Overview** 

Causes severe skin burns and eye damage. Moisture sensitive.

#### Classification of the substance or mixture

Skin Corrosion/Irritation	Category 1 B
Serious Eye Damage/Eye Irritation	Category 1

#### **Label Elements**



Signal Word Danger

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#### **Hazard Statements**

H314 - Causes severe skin burns and eye damage

#### **Precautionary Statements**

#### Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection

#### Response

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

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

P310 - Immediately call a POISON CENTER or doctor

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P362 + P364 - Take off contaminated clothing and wash it before reuse

#### Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

#### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

#### **Physical and Chemical Hazards**

None identified.

# **Health Hazards**

Corrosive. Causes skin and eye burns.

#### **Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Is not likely mobile in the environment. Reacts with water.

This product does not contain any known or suspected endocrine disruptors.

# **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %
2-Bromo-5-methoxybenzene-1-carbonyl chloride	56658-04-9	100

# **SECTION 4. FIRST AID MEASURES**

#### **General Advice**

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

#### **Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

#### **Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Call a physician immediately.

#### Inhalation

If not breathing, give artificial respiration. Remove from exposure, lie down. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately.

#### Ingestion

Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.

#### Most important symptoms and effects

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible

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perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

#### Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

#### Notes to Physician

Treat symptomatically.

# **SECTION 5. FIRE-FIGHTING MEASURES**

# **Suitable Extinguishing Media**

Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam. CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

#### Extinguishing media which must not be used for safety reasons

No information available.

#### Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes.

## **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. Thermal decomposition can lead to release of irritating gases and vapors.

# **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### **Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

## **Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

#### Methods for Containment and Clean Up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.

Refer to protective measures listed in Sections 8 and 13.

# **SECTION 7. HANDLING AND STORAGE**

#### Handling

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Handle under an inert atmosphere.

# Storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Corrosives area. Keep under nitrogen. Store under an inert atmosphere. Protect from moisture. Keep containers tightly closed in a dry, cool and well-ventilated place.

## Specific Use(s)

Use in laboratories

# **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**Control Parameters** 

#### **Exposure Controls**

#### **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 (European standard - EN 166)

Hand Protection Protective gloves

Glove material Natural rubber Butyl rubber	Breakthrough time See manufacturers recommendations	Glove thickness	EU standard EN 374	Glove comments (minimum requirement)
Nitrile rubber Neoprene	recommendations			
PVC				

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure 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.

Remove gloves with care avoiding skin contamination.

Skin and body protection Long sleeved clothing

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Particulates filter conforming to EN 143 Acid gases filter Type

E Yellow conforming to EN14387

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN

141

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

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

**Environmental exposure controls** No information available.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance Light yellow Liquid

Odor No information available
Odor Threshold No data available
pH No data available

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Liquid

**Melting Point/Range** No data available **Softening Point** No data available

**Boiling Point/Range** 110 °C / 230 °F

@ 0.1 mmHg **Flash Point** Method - No information available No information available

**Evaporation Rate** No data available Flammability (solid,gas) Not applicable No data available **Explosion Limits** 

No data available **Vapor Pressure** 

Vapor Density No data available (Air = 1.0)

No information available

No data available Specific Gravity / Density **Bulk Density** Not applicable Liquid **Water Solubility** Reacts with water

Solubility in other solvents Partition Coefficient (n-octanol/water)

**Autoignition Temperature** No data available **Decomposition Temperature** No data available **Viscosity** No data available

No information available **Explosive Properties Oxidizing Properties** No information available

Molecular Formula C8 H6 Br Cl O2

**Molecular Weight** 249.49

# **SECTION 10. STABILITY AND REACTIVITY**

Stability Moisture sensitive.

**Hazardous Reactions** None under normal processing. **Hazardous Polymerization** No information available.

**Conditions to Avoid** Incompatible products. Exposure to moist air or water.

Bases. Amines. Reducing Agent. Materials to avoid

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen halides. Chlorine. Bromine.

Hydrogen chloride gas.

# **SECTION 11. TOXICOLOGICAL INFORMATION**

**Product Information** No acute toxicity information is available for this product

(a) acute toxicity;

(b) skin corrosion/irritation; Category 1 B

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

No data available Respiratory Skin No data available

No data available (e) germ cell mutagenicity;

No data available (f) carcinogenicity;

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There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

No information available. **Target Organs** 

(j) aspiration hazard; No data available

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

delayed

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

## **SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity effects** Reacts with water so no ecotoxicity data for the substance is available.

Persistence and Degradability

**Persistence** Degradability

Degradation in sewage

treatment plant

No information available

Persistence is unlikely, based on information available.

Reacts with water. Water reactive.

**Bioaccumulative Potential** Product does not bioaccumulate due to reaction with water

Reacts with water Is not likely mobile in the environment Mobility in soil

**Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential** 

This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste from Residues/Unused

**Products** 

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

Waste codes should be assigned by the user based on the application for which the product Other Information

was used. Do not empty into drains. Do not flush to sewer. Large amounts will affect pH

and harm aquatic organisms.

#### **SECTION 14. TRANSPORT INFORMATION**

Road and Rail Transport

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## 2-Bromo-5-methoxybenzene-1-carbonyl chloride

UN-No UN3265

Proper Shipping Name Corrosive liquid, acidic, organic, n.o.s.

**Technical Shipping Name** 2-Bromo-5-methoxybenzene-1-carbonyl chloride

Hazard Class 8
Packing Group

IMDG/IMO

UN-No UN3265

Proper Shipping Name Corrosive liquid, acidic, organic, n.o.s.

**Technical Shipping Name** 2-Bromo-5-methoxybenzene-1-carbonyl chloride

Hazard Class 8
Packing Group | |

<u>IATA</u>

UN-No UN3265

Proper Shipping Name Corrosive liquid, acidic, organic, n.o.s.

**Technical Shipping Name** 2-Bromo-5-methoxybenzene-1-carbonyl chloride

Hazard Class 8
Packing Group ||

Special Precautions for User No special precautions required

## **SECTION 15. REGULATORY INFORMATION**

#### **International Inventories**

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

# **National Regulations**

## **SECTION 16. OTHER INFORMATION**

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**Revision Summary** 9, 12, SDS sections updated, 1, 2, 11, 15, 16.

**Training Advice** 

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

## Legend

CAS - Chemical Abstracts Service

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

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances
IECSC - Chinese Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
NZIOC - New Zealand Inventory of Chemicals

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WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment **LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration **PBT** - Persistent, Bioaccumulative, Toxic

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%
POW - Partition coefficient Octanol:Water
vPvB - very Persistent, very Bioaccumulative

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate
VOC - (Volatile Organic Compound)

# Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

## **Disclaimer**

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**End of Safety Data Sheet**