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ALFAAA14520

# 2-Bromobenzoyl chloride

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

产品说明:	2-溴苯甲酰氯, 98%
Product Description:	2-Bromobenzoyl chloride
Cat No. :	A14520
Synonyms	Benzoyl chloride, o-bromo-
CAS No	7154-66-7
Molecular Formula	C7 H4 Br Cl O
Supplier	Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific) Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608
Emergency Telephone Number	For information <b>US</b> call: 001-800-227-6701 / <b>Europe</b> call: +32 14 57 52 11 Emergency Number <b>US:</b> 001-201-796-7100 / <b>Europe:</b> +32 14 57 52 99 <b>CHEMTREC</b> Tel. No. <b>US:</b> 001-800-424-9300 / <b>Europe:</b> 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 State	Appearance	Odor
Liquid	Clear	No information available
	Emergency Overview	

Causes severe skin burns and eye damage. Moisture sensitive. Lachrymator (substance which increases the flow of tears).

#### Classification of the substance or mixture

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

### Label Elements

Г



Signal Word

Danger

# 2-Bromobenzoyl chloride

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

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

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

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

P310 - Immediately call a POISON CENTER or doctor

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. Decomposes in contact with water.

### **Other Hazards**

Lachrymator (substance which increases the flow of tears)

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

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
2-Bromobenzoyl chloride	7154-66-7	>95

# **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

## 2-Bromobenzoyl chloride

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

CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

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

Water. Contact with water liberates toxic gas.

#### **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. Contact with water liberates toxic gas.

#### **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. Do not expose spill to water.

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. Do not allow contact with water.

#### Storage

Keep in a dry place. Keep container tightly closed. Keep from any possible contact with water. Keep away from water or moist air. To maintain product quality: Keep refrigerated.

### Specific Use(s)

Use in laboratories

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

#### **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	Protectiv	ve gloves		
Glove material Nitrile rubber Neoprene Natural rubber	Breakthrough time See manufacturers recommendations	Glove thickness -	EU standard EN 374	Glove comments (minimum requirement)

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 <b>Recommended Filter type:</b> Organic gases and vapours filter Type A Brown 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. <b>Recommended half mask:-</b> 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	Clear
Physical State	Liquid
Odor	No information available
Odor Threshold	No data available
pH	No information available

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Melting Point/Range	11 °C / 51.8 °F	
Softening Point	No data available	
Boiling Point/Range	245 °C / 473 °F	@ 760 mmHg
Flash Point	107 °C / 224.6 °F	Method - No information available
Evaporation Rate	No data available	
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	No data available	
-		
Vapor Pressure	No information available	
Vapor Density	7.57	(Air = 1.0)
Specific Gravity / Density	1.670	
Bulk Density	Not applicable	Liquid
Water Solubility	Decomposes in contact with water	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/wa	iter)	
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	
Viscosity	No data available	
Explosive Properties No information available		
Oxidizing Properties	No information available	
Molecular Formula	C7 H4 Br Cl O	
Molecular Weight	219.46	
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# **SECTION 10. STABILITY AND REACTIVITY**

Stability	Moisture sensitive.
Hazardous Reactions Hazardous Polymerization	None under normal processing. No information available.
Conditions to Avoid	Incompatible products. Exposure to moist air or water. Exposure to moisture.
Materials to avoid	Water. Strong bases. Alcohols. Strong oxidizing agents.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen halides. Phosgene. Hydrogen chloride gas.

	SECTION 11. TOXICOLOGICAL INFORMATION
Product Information (a) acute toxicity;	No acute toxicity information is available for this product
(b) skin corrosion/irritation;	Category 1 B
(c) serious eye damage/irritation;	Category 1
(d) respiratory or skin sensitization Respiratory Skin	n; No data available No data available
(e) germ cell mutagenicity;	No data available
(f) carcinogenicity;	No data available

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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	
Target Organs	No information available.	
(j) aspiration hazard;	No data available	
Other Adverse Effects	The toxicological properties have not been fully investigated.	
Symptoms / effects,both acute and delayed	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. Decomposes in contact with water. Decomposes in contact with water.	
Bioaccumulative Potential	Product does not bioaccumulate due to reaction with water	
Mobility in soil	Decomposes in contact with water Is not likely mobile in the environment	
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.	
Other Information	Waste codes should be assigned by the user based on the application for which the product 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	

# SECTION 14. TRANSPORT INFORMATION

Road and Rail Transport

### 2-Bromobenzoyl chloride

UN-No	UN3265
Proper Shipping Name	Corrosive liquid, acidic, organic, n.o.s.
Technical Shipping Name	2-Bromobenzoyl chloride
Hazard Class	8
Packing Group	II
UN-No	UN3265
Proper Shipping Name	Corrosive liquid, acidic, organic, n.o.s.
Technical Shipping Name	2-Bromobenzoyl chloride
Hazard Class	8
Packing Group	II
IATA	
UN-No	UN3265
Proper Shipping Name	Corrosive liquid, acidic, organic, n.o.s.
Technical Shipping Name	2-Bromobenzoyl chloride
Hazard Class	8
Packing Group	II
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).

Component	The Inventory of Hazardous Chemicals (2015 Edition)	goods GB	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
2-Bromobenzoyl	X	-	Х	-	230-507-4	-	-	Х	Х	Х	-	-
chloride												

#### **National Regulations**

# **SECTION 16. OTHER INFORMATION**

Prepared By Creation Date Revision Date Revision Summary Health, Safety and Environmental Department 07-Mar-2012 27-Apr-2024 New emergency telephone response service provider.

#### **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.

## 2-Bromobenzoyl chloride

# 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 ENCS - Japanese Existing and New Chemical Substances **PICCS** - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances AICS - Australian Inventory of Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances NZIOC - New Zealand Inventory of Chemicals WEL - Workplace Exposure Limit TWA - Time Weighted Average ACGIH - American Conference of Governmental Industrial Hygienists IARC - International Agency for Research on Cancer **DNEL** - Derived No Effect Level PNEC - Predicted No Effect Concentration **RPE** - Respiratory Protective Equipment LD50 - Lethal Dose 50% LC50 - Lethal Concentration 50% EC50 - Effective Concentration 50% NOEC - No Observed Effect Concentration POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative PBT - Persistent, Bioaccumulative, Toxic ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association** Dangerous Goods Code MARPOL - International Convention for the Prevention of Pollution from ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road Ships **OECD** - Organisation for Economic Co-operation and Development ATE - Acute Toxicity Estimate BCF - Bioconcentration factor

# Key literature references and sources for data

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

**IMO/IMDG** - International Maritime Organization/International Maritime

VOC - (Volatile Organic Compound)

## 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 Safety Data Sheet**