# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

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ALFAAA15918

# 1-Bromo-4-n-hexylbenzene

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

产品说明: 1-溴-4-正己基苯

Product Description: 1-Bromo-4-n-hexylbenzene

Cat No.: A15918

**Synonyms** 4-n-Hexylbromobenzene

CAS No 23703-22-2 Molecular Formula C12 H17 Br

Supplier Avocado Research Chemicals Ltd.

(Part of Thermo Fisher Scientific)

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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 State Appearance Odor

Liquid Clear No information available

**Emergency Overview** 

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

## Classification of the substance or mixture

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity - (single exposure)	Category 3

#### **Label Elements**



Signal Word Warning

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#### 1-Bromo-4-n-hexylbenzene

#### **Hazard Statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

#### **Precautionary Statements**

#### Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

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

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 if you feel unwell

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**

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

#### **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 due its low water solubility. Spillage unlikely to penetrate soil. The product is insoluble and sinks in water.

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

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

Component	CAS No	Weight %		
Benzene, 1-bromo-4-hexyl	23703-22-2	>=95		

#### **SECTION 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 and effects

None reasonably foreseeable.

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#### 1-Bromo-4-n-hexylbenzene

#### Self-Protection of the First Aider

No special precautions required.

#### **Notes to Physician**

Treat symptomatically.

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

#### **Suitable Extinguishing Media**

Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical 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.

#### **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.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### **Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required.

#### **Environmental Precautions**

Should not be released into the environment.

#### Methods for Containment and Clean Up

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

Refer to protective measures listed in Sections 8 and 13.

#### **SECTION 7. HANDLING AND STORAGE**

## Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Do not get in eyes, on skin, or on clothing.

#### Storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

#### Specific Use(s)

Use in laboratories

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

#### **Control Parameters**

#### **Exposure Controls**

#### **Engineering Measures**

None under normal use conditions. Ensure that eyewash stations and safety showers are close to the workstation location. .

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#### 1-Bromo-4-n-hexylbenzene

Personal protective equipment

**Eye Protection** Goggles (European standard - EN 166)

Hand Protection Protective gloves

Glove material Breakthrough time Glove thickness EU standard Glove comments

Nitrile rubber See manufacturers - EN 374 (minimum requirement)

Neoprene recommendations

Natural rubber

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 Wear appropriate protective gloves and clothing to prevent skin exposure

**Respiratory Protection** No protective equipment is needed under normal use conditions.

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: Particle filter

Small scale/Laboratory use Maintain adequate ventilation

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

Liquid

141

**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

Melting Point/RangeNo data availableSoftening PointNo data availableBoiling Point/Range280 °C / 536 °FFlash Point> 120 °C / 248 °F

Flash Point > 120 °C / 248 °F Method - No information available

Evaporation Rate No data available

Flammability (solid,gas)

Not applicable

Explosion Limits

No data available

Explosion Limits No data available

Vapor Pressure
No data available

Vapor Density
No data available
(Air = 1.0)
Specific Gravity / Density
1.179 @ 20°C

Specific Gravity / Density 1.179 @ 20°C

Bulk Density Not applicable Liquid

Water Solubility Insoluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

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#### 1-Bromo-4-n-hexylbenzene

Autoignition Temperature Decomposition Temperature

Viscosity

No data available No data available No data available

Explosive Properties Oxidizing Properties

No information available No information available

Molecular FormulaC12 H17 BrMolecular Weight241.17Refractive index1.5200-1.5220

## **SECTION 10. STABILITY AND REACTIVITY**

**Stability** Stable under normal conditions.

Hazardous ReactionsNone under normal processing.Hazardous PolymerizationNo information available.

Conditions to Avoid Incompatible products.

Materials to avoid Strong oxidizing agents.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen bromide.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

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

(a) acute toxicity;

**(b) skin corrosion/irritation**; Category 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; Category 3

Results / Target organs Respiratory system

(i) STOT-repeated exposure; No data available

Target Organs None known.

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(j) aspiration hazard; No data available

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

Symptoms / effects,both acute and No information available

delayed

#### **SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity effects** Do not flush into surface water or sanitary sewer system. Do not allow material to

contaminate ground water system.

Persistence and Degradability

**Persistence** 

Insoluble in water.

**Bioaccumulative Potential** May have some potential to bioaccumulate

Mobility in soil Spillage unlikely to penetrate soil The product is insoluble and sinks in water Is not likely

mobile in the environment due its low water solubility

**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.

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

**Road and Rail Transport** Not Regulated

IMDG/IMO Not regulated

IATA Not regulated

**Special Precautions for User** No special precautions required

## **SECTION 15. REGULATORY INFORMATION**

#### International Inventories

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

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Component	The Inventory of Hazardous Chemicals (2015 Edition)	goods GB	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Benzene,	-	-	X	Х	-	-	-	-	-		-	-
1-bromo-4-hexyl												

#### **National Regulations**

## **SECTION 16. OTHER INFORMATION**

Prepared By Health, Safety and Environmental Department

Revision Date 01-May-2024

**Revision Summary** New emergency telephone response service provider.

**Training Advice** 

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

#### 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

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% **NOEC** - No Observed Effect Concentration **EC50** - Effective Concentration 50% **POW** - Partition coefficient Octanol:Water

PBT - Persistent, Bioaccumulative, Toxic vPvB - very Persistent, very Bioaccumulative

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

ADR - European Agreement Concerning the International Carriage of

Dangerous Goods by Road

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

BCF - Bioconcentration factor

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

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

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

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

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materials or in any process, unless specified in the text

**End of Safety Data Sheet**