

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Creation Date 15-Dec-2011

Revision Date 22-Sep-2023

Revision Number 7

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Description:	1-Bromo-2-naphthol
Cat No. :	107160000; 107160250; 107161000
Synonyms	Disthemin.
CAS No	573-97-7
EC No	209-363-1
Molecular Formula	C10 H7 Br O

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use	Laboratory chemicals.
Uses advised against	No Information available

1.3. Details of the supplier of the safety data sheet

Company

UK entity/business	name
Fisher Scientific UK	
Bishop Meadow Road	J.
Loughborough, Leice	stershire LE11 5RG, United Kingdom

EU entity/business name Thermo Fisher Scientific

Janssen Pharmaceuticalaan 3a, 2440 Geel, Belgium

E-mail address

begel.sdsdesk@thermofisher.com

1.4. 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

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

1-Bromo-2-naphthol

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Acute oral toxicity Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Specific target organ toxicity - (single exposure)

Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

2.2. Label elements



Signal Word

Warning

Hazard Statements

H335 - May cause respiratory irritation

H319 - Causes serious eye irritation

H315 - Causes skin irritation

H302 - Harmful if swallowed

Precautionary Statements

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

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

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P312 - Call a POISON CENTER or doctor if you feel unwell

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

2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Component	CAS No	EC No	Weight %	CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
1-Bromo-2-naphthol	573-97-7	EEC No. 209-363-1	>95	Acute Tox. 4 (H302) STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)

Category 4 (H302) Category 2 (H315) Category 2 (H319) Category 3 (H335) Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of 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.		
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.		
Inhalation	Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention.		
Self-Protection of the First Aider	Use personal protective equipment as required.		
4.2. Most important symptoms and effects, both acute and delayed			

None reasonably foreseeable.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons No information available.

5.2. Special hazards arising from the substance or mixture

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

Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrogen halides.

5.3. Advice 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

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation.

1-Bromo-2-naphthol

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

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

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

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

Technical Rules for Hazardous Substances (TRGS) 510 Class 11 Storage Class (LGK) (Germany)

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

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

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL) No information available

Predicted No Effect Concentration (PNEC)

No information available.

8.2. 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

Eye Protection		(European standard	I - EN 166)	
Hand Protection	Protective gloves			
Nitrile rubber Se	eakthrough time e manufacturers commendations	Glove thickness -	EU standard EN 374	Glove comments (minimum requirement)
Skin and body protection Long sleeved clothing.				

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.

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
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:- Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted

Environmental exposure controls No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State	Powder Solid
Appearance	Brown
Odor	No information available
Odor Threshold	No data available

Melting Point/Range77 - 81 °C / 170.6 - 177.8 °FSoftening PointNo data availableBoiling Point/RangeNo information availableFlammability (liquid)Not applicableSolidFlammability (solid,gas)No information availableExplosion LimitsNo information availableFlash PointNo information availableAutoignition TemperatureNo data availableDecomposition Temperature> 130°CPHNo information available	
Boiling Point/RangeNo information availableFlammability (liquid)Not applicableSolidFlammability (solid,gas)No information availableSolidExplosion LimitsNo data availableMethod -Flash PointNo information availableMethod -Autoignition Temperature> 130°C	
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Flammability (solid,gas) Explosion LimitsNo information available No data availableFlash Point Autoignition Temperature Decomposition TemperatureNo information available No data availableMethod -	
Flammability (solid,gas) Explosion LimitsNo information available No data availableFlash Point Autoignition Temperature Decomposition TemperatureNo information available No data availableMethod -	
Explosion LimitsNo data availableFlash PointNo information availableMethod -Autoignition TemperatureNo data available> 130°C	
Autoignition TemperatureNo data availableDecomposition Temperature> 130°C	
Decomposition Temperature > 130°C	No information available
DH No information available	
Viscosity Not applicable Solid	
Water Solubility Insoluble	
Solubility in other solvents No information available	
Partition Coefficient (n-octanol/water)	
Component log Pow	
1-Bromo-2-naphthol 3.58	
Vapor Pressure No data available	
Density / Specific Gravity No data available	
Bulk Density No data available	
Vapor Density Not applicable Solid	
Particle characteristics No data available	
9.2. Other information	
Molecular FormulaC10 H7 Br OMolecular Weight223.07Evaporation RateNot applicable - Solid	

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity	None known, based on information available		
10.2. Chemical stability	Stable under recommended storage conditions.		
10.3. Possibility of hazardous reactions			
Hazardous Polymerization Hazardous Reactions	No information available. None under normal processing.		
10.4. Conditions to avoid	Incompatible products. Excess heat. Avoid dust formation.		
10.5. Incompatible materials	Strong oxidizing agents. Strong bases.		

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen halides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information

1-Bromo-2-naphthol

(a) acute toxicity;

(a) acute toxicity; Oral	Category 4				
Dermal	No data available				
Inhalation	No data available				
Component	LD50 Oral	LD50 Dermal	LC50 Inhalation		
1-Bromo-2-naphthol	1125 mg/kg (Mouse)	-	-		
(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				
	There are no known carcinoger	lic 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				
Torgot Orgono	No information available.				
Target Organs					
(j) aspiration hazard;	Not applicable Solid				
	Solid				
Symptoms / effects,both acute and delayed	No information available.				
11.2. Information on other hazards					
Endocrine Disrupting Properties	Assess endocrine disrupting pr known or suspected endocrine		s product does not contain any		
QF					
SECTION 12: ECOLOGICAL INFORMATION					

12.1. Toxicity Ecotoxicity effects

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

1-Bromo-2-naphthol

12.2. Persistence and degradability Insoluble in water, Persistence is unlikely. Persistence 12.3. Bioaccumulative potential May have some potential to bioaccumulate Component log Pow **Bioconcentration factor (BCF)** 1-Bromo-2-naphthol 3.58 No data available 12.4. Mobility in soil Spillage unlikely to penetrate soil Is not likely mobile in the environment due its low water solubility. 12.5. Results of PBT and vPvB No data available for assessment. assessment 12.6. Endocrine disrupting properties **Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors 12.7. Other adverse effects Persistent Organic Pollutant This product does not contain any known or suspected substance **Ozone Depletion Potential** This product does not contain any known or suspected substance **SECTION 13: DISPOSAL CONSIDERATIONS**

13.1. Waste treatment methods

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.
European Waste Catalogue (EWC)	According to the European Waste Catalog, Waste Codes are not product specific, but application specific.
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.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

Not regulated

14.1. UN number14.2. UN proper shipping name14.3. Transport hazard class(es)14.4. Packing group

<u>ADR</u>

Not regulated

14.1. UN number 14.2. UN proper shipping name 14.3. Transport hazard class(es) 1-Bromo-2-naphthol

14.4. Packing group

	Not regulated
<u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> <u>14.4. Packing group</u>	
14.5. Environmental hazards	No hazards identified
14.6. Special precautions for user	No special precautions required.
14.7. Maritime transport in bulk according to IMO instruments	Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION

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

International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
1-Bromo-2-naphthol	573-97-7	209-363-1	-	-	-	Х	-	Х	Х
Component	CAS No	TSCA	TSCA In	ventory	DSI	NDSI	AICS	NZIOC	PICCS

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
1-Bromo-2-naphthol	573-97-7	-	-	-	-	Х	Х	Х

Legend: X - Listed '-' - Not Listed

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

Not applicable

Authorisation/Restrictions according to EU REACH

1	Component	CAS No	REACH (1907/2006) -	REACH (1907/2006) -	REACH Regulation (EC
			Annex XIV - Substances	Annex XVII - Restrictions	1907/2006) article 59 -
			Subject to Authorization	on Certain Dangerous	Candidate List of
			-	Substances	Substances of Very High
					Concern (SVHC)
	1-Bromo-2-naphthol	573-97-7	-	-	-

Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) -	Seveso III Directive (2012/18/EC) -
-		Qualifying Quantities for Major Accident	Qualifying Quantities for Safety Report
		Notification	Requirements
1-Bromo-2-naphthol	573-97-7	Not applicable	Not applicable

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification

Water endangering class = 3 (self classification)

Component	Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81)	Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC)	Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure
1-Bromo-2-naphthol 573-97-7 (>95)	Prohibited and Restricted Substances		

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Legend

CAS - Chemical Abstracts Service EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances	 TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIOC - New Zealand Inventory of Chemicals
 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 	 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
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	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)

1-Bromo-2-naphthol

Key literature references and sources for data https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

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.

Creation Date	15-Dec-2011
Revision Date	22-Sep-2023
Revision Summary	Not applicable.

This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

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