

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

Revision Date 22-Sep-2023

Revision Number 5

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

1.1. Product identifier

Product Description: Cat No. : Synonyms CAS No Molecular Formula	<u>1-Bromotetradecane</u> 187380000; 187380025; 187380050; 187381000; 187385000 Myristyl bromide; Tetradecyl bromide 112-71-0 C14 H29 Br
1.2. Relevant identified uses of the	substance or mixture and uses advised against
Recommended Use Uses advised against	Laboratory chemicals. No Information available
1.3. Details of the supplier of the sa	fety data sheet
Company	UK entity/business name Fisher Scientific UK Bishop Meadow Road, Loughborough, Leicestershire 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

<u>Health hazards</u>

Based on available data, the classification criteria are not met

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Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

2.2. Label elements

None required

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
Tetradecane, 1-bromo-	112-71-0	EEC No. 203-999-3	98	-

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

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 soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. If possible drink milk afterwards.
Inhalation	Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration.
Self-Protection of the First Aider	No special precautions required.
4.2. Most important symptoms and effects, both acute and delayed	
	Difficulty in breathing Inhalation of high vanor concentrations may cause symptoms like

Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

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

Notes to Physician

Treat symptomatically. Symptoms may be delayed.

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

Ensure adequate ventilation.

6.2. Environmental precautions

See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). 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

Avoid contact with skin and eyes. Avoid contact with skin and clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Avoid breathing vapors or mists. Do not ingest. If swallowed then seek immediate medical assistance. Wash thoroughly after handling.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do

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not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

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

Technical Rules for Hazardous Substances (TRGS) 510 Class 10 **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

None under normal use conditions.

Personal protective equipment Eye Protection	Wear safety glasses with sid	le shields (or goggles)	(European standard - EN 166)
Hand Protection	Protective gloves		
	ugh time Glove thickness	EU standard	Glove comments
Viton (R) See manuf		EN 374	(minimum requirement)
Skin and body protection	I ong sleeved clothing		

Skin and body protection Long sleeved clothing.

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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	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 141

Environmental exposure controls No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State	Liquid	
Appearance Odor Odor Threshold Melting Point/Range Softening Point Boiling Point/Range Flammability (liquid) Flammability (solid,gas) Explosion Limits	Yellow Odorless No data available 5 - 6 °C / 41 - 42.8 °F No data available 175 - 178 °C / 347 - 352.4 °F No data available Not applicable No data available	@ 20 mmHg Liquid
Flash Point Autoignition Temperature Decomposition Temperature pH Viscosity Water Solubility Solubility in other solvents Partition Coefficient (n-octanol/wate	,	Method - No information available
Vapor Pressure Density / Specific Gravity Bulk Density Vapor Density Particle characteristics	No data available 0.930 Not applicable No data available Not applicable (liquid)	Liquid (Air = 1.0)
9.2. Other information Molecular Formula	C14 H29 Br	
Molecular Weight	277.28	

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

- 10.3. Possibility of hazardous reactions
- Hazardous PolymerizationNo information available.Hazardous ReactionsNo information available.
- 10.4. Conditions to avoid Incompatible products.
- 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	No acute toxicity information is available for this product
(a) acute toxicity; Oral Dermal Inhalation	No data available No data available No data available
(b) skin corrosion/irritation;	No data available
(c) serious eye damage/irritation;	No data available
(d) respiratory or skin sensitization Respiratory Skin	; No data available 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;	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	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
11.2. Information on other hazards	

Endocrine Disrupting Properties	Assess endocrine disrupting properties for human health.	This product does not contain any
	known or suspected endocrine disruptors.	

SECTION 12: ECOLOGICAL INFORMATION

<u>12.1. Toxicity</u>	
Ecotoxicity effects	Contains no substances known to be hazardous to the environment or that are not
	degradable in waste water treatment plants.

12.2. Persistence and degradability Persistence	Insoluble in water, May persist, based on information available.
12.3. Bioaccumulative potential	May have some potential to bioaccumulate
<u>12.4. Mobility in soil</u>	Spillage unlikely to penetrate soil The product is insoluble and floats on water The product evaporates slowly Is not likely mobile in the environment due its low water solubility. Spillage unlikely to penetrate soil
<u>12.5. Results of PBT and vPvB</u> assessment	No data available for assessment.
<u>12.6. Endocrine disrupting</u> properties Endocrine Disruptor Information	This product does not contain any known or suspected endocrine disruptors
<u>12.7. Other adverse effects</u> Persistent Organic Pollutant Ozone Depletion Potential	This product does not contain any known or suspected substance This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

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Waste from Residues/Unused	Chemical waste generators must determine whether a discarded chemical is classified as a
Products	hazardous waste. Consult local, regional, and national hazardous waste regulations to
	ensure complete and accurate classification.

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Contaminated Packaging	Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.
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.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO	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>	
ADR	Not regulated
14.1. UN number 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group	
IATA	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
SE	CTION 15: REGULATORY INFORMATION

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

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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
Tetradecane, 1-bromo-	112-71-0	203-999-3	-	-	X	Х	2015-3-66	Х	Х
							12		
							· · · · ·		
Component	CAS No	TSCA	notific	ventory ation - Inactive	DSL	NDSL	AICS	NZIoC	PICCS

Active-Inactive

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Tetradecane, 1-bromo-	112-71-0	Х	ACTIVE	-	Х	Х	Х	Х

Legend: X - Listed '-' - Not Listed

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do) Authorisation/Restrictions according to EU REACH Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	5	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Tetradecane, 1-bromo-	112-71-0	-	-	-

Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report
		Notification	Requirements
Tetradecane, 1-bromo-	112-71-0	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)

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

Legend

CAS - Chemical Abstracts Service

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

EINECS/ELINCS - European Inventory of Existing Commercial Chemical

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Substances/EU List of Notified Chemical Substances	DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances	ENCS - Japanese Existing and New 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	Predicted No Effect Concentration (PNEC)
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
PBT - Persistent, Bioaccumulative, Toxic	vPvB - very Persistent, very Bioaccumulative
	-,, -, -,
ADR - European Agreement Concerning the International Carriage of	ICAO/IATA - International Civil Aviation Organization/International Air
Dangerous Goods by Road	Transport Association
IMO/IMDG - International Maritime Organization/International Maritime	MARPOL - International Convention for the Prevention of Pollution from
Dangerous Goods Code	Ships
OECD - Organisation for Economic Co-operation and Development	ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor	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

Training Advice

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

Revision Date Revision Summary 22-Sep-2023 Not applicable.

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

Disclaimer

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End of Safety Data Sheet