SAFETY DATA SHEET

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

Creation Date 13-Jul-2010 **Revision Date** 04-Apr-2024 **Revision Number** 9

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

1.1. Product identifier

Product Description: N,N-Dimethyloctadecylamine
Cat No. : **408430000; 408430010; 408432500**
Synonyms Dimethylstearamine; Dymanthine.
CAS No 124-28-7
EC No 204-694-8
Molecular Formula C20 H43 N

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,
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

Health hazards

Acute oral toxicity	Category 4 (H302)
Skin Corrosion/Irritation	Category 1 B (H314)
Serious Eye Damage/Eye Irritation	Category 1 (H318)
Environmental hazards	
Acute aquatic toxicity	Category 1 (H400)
Chronic aquatic toxicity	Category 1 (H410)

Full text of Hazard Statements: see section 16

2.2. Label elements

Signal Word **Danger**

Hazard Statements

H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements

P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position 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/physician
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB)
This product does not contain any known or suspected endocrine disruptors

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Component	CAS No	EC No	Weight %	CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
1-Octadecanamine, N,N-dimethyl-	124-28-7	EEC No. 204-694-8	89	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
N,N-Dimethyl-1-hexadecylamine	112-69-6	EEC No. 203-997-2	>=3-<5	Acute Tox. 4 (H302)

				Skin Corr. 1B (H314) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
N,N-Dimethylicosylamine	45275-74-9	EEC No. 256-216-2	>=1-<2.5	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
1-Tetradecanamine, N,N-dimethyl-	112-75-4	EEC No. 204-002-4	>=1-<2.5	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
1-Octadecanol	112-92-5	EEC No. 204-017-6	>=1-<2.5	-
1-Octadecanamine, N-methyl-N-octadecyl-	4088-22-6	EEC No. 223-819-7	>=1-<2.5	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Dimethylamine	124-40-3	EEC No. 204-697-4	>=0.1-<0.25	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) STOT SE 3 (H335)

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
1-Octadecanamine, N,N-dimethyl-	-	1 (acute) 10 (Chronic)	-
N,N-Dimethyl-1-hexadecylamine	-	10 (acute) 1 (Chronic)	-
1-Tetradecanamine, N,N-dimethyl-	-	10 (acute) 1 (Chronic)	-
Dimethylamine	STOT SE 3 :: C>=5%	-	-

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

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

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. Immediate medical attention is required.

Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. 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. Immediate medical attention is required.

Self-Protection of the First Aider Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

4.2. Most important symptoms and effects, both acute and delayed

Causes burns by all exposure routes. . Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus

should be investigated

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

Notes to Physician Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media
CO_2, dry chemical, dry sand, 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

The product causes burns of eyes, skin and mucous membranes. Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous Combustion Products
Carbon monoxide (CO), Carbon dioxide (CO_2), Nitrogen oxides (NOx).

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional Ecological Information. Avoid release to the environment. Collect spillage.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. 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

Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance.

Hygiene Measures
When using do not eat, drink or smoke. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

7.2. Conditions for safe storage, including any incompatibilities

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

Technical Rules for Hazardous Substances (TRGS) 510 Storage Class (LGK) (Germany) Class 8A

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits
List source(s): **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. **IRE -** 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

Component	The United Kingdom	European Union	Ireland
Dimethylamine	STEL: 6 ppm 15 min STEL: 11 mg/m³ 15 min TWA: 2 ppm 8 hr TWA: 3.8 mg/m³ 8 hr	TWA: 2 ppm (8h) TWA: 3.8 mg/m³ (8h) STEL: 5 ppm (15min) STEL: 9.4 mg/m³ (15min)	TWA: 2 ppm 8 hr. TWA: 3.8 mg/m³ 8 hr. STEL: 5 ppm 15 min STEL: 9.4 mg/m³ 15 min

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)
See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
1-Octadecanol 112-92-5 (>=1-<2.5)				DNEL = 110mg/kg bw/day
Dimethylamine 124-40-3 (>=0.1-<0.25)		DNEL = 1.95mg/kg bw/day		DNEL = 0.0874mg/kg bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
1-Octadecanamine, N,N-dimethyl- 124-28-7 (89)	DNEL = 1mg/m³	DNEL = 1mg/m³	DNEL = 1mg/m³	DNEL = 1mg/m³
N,N-Dimethyl-1-hexadecylamin	DNEL = 1mg/m³	DNEL = 1mg/m³	DNEL = 1mg/m³	DNEL = 1mg/m³

e 112-69-6 (>=3-<5)				
1-Tetradecanamine, N,N-dimethyl- 112-75-4 (>=1-<2.5)	DNEL = 1mg/m³	DNEL = 1mg/m³	DNEL = 1mg/m³	DNEL = 1mg/m³
1-Octadecanol 112-92-5 (>=1-<2.5)			DNEL = 224mg/m³	DNEL = 389mg/m³
Dimethylamine 124-40-3 (>=0.1-<0.25)	DNEL = 12.9mg/m³	DNEL = 9.4mg/m³		DNEL = 3.8mg/m³

Predicted No Effect Concentration (PNEC)
See values below.

Component	Fresh water	Fresh water sediment	Water Intermittent	Microorganisms in sewage treatment	Soil (Agriculture)
1-Octadecanamine, N,N-dimethyl- 124-28-7 (89)	PNEC = 0.26µg/L	PNEC = 1.25mg/kg sediment dw	PNEC = 0.26µg/L	PNEC = 130µg/L	PNEC = 1mg/kg soil dw
N,N-Dimethyl-1-hexadecyl amine 112-69-6 (>=3-<5)	PNEC = 0.26µg/L	PNEC = 1.25mg/kg sediment dw	PNEC = 0.26µg/L	PNEC = 130µg/L	PNEC = 1mg/kg soil dw
1-Tetradecanamine, N,N-dimethyl- 112-75-4 (>=1-<2.5)	PNEC = 0.26µg/L	PNEC = 1.25mg/kg sediment dw	PNEC = 0.26µg/L	PNEC = 130µg/L	PNEC = 1mg/kg soil dw
1-Octadecanol 112-92-5 (>=1-<2.5)		PNEC = 56.6mg/kg sediment dw			PNEC = 11.3mg/kg soil dw
Dimethylamine 124-40-3 (>=0.1-<0.25)	PNEC = 0.06mg/L	PNEC = 3.26mg/kg sediment dw	PNEC = 0.06mg/L	PNEC = 100mg/L	PNEC = 0.0385mg/kg soil dw

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
1-Octadecanamine, N,N-dimethyl- 124-28-7 (89)	PNEC = 0.03µg/L	PNEC = 0.125mg/kg sediment dw			
N,N-Dimethyl-1-hexadecyl amine 112-69-6 (>=3-<5)	PNEC = 0.03µg/L	PNEC = 0.125mg/kg sediment dw			
1-Tetradecanamine, N,N-dimethyl- 112-75-4 (>=1-<2.5)	PNEC = 0.03µg/L	PNEC = 0.125mg/kg sediment dw			
1-Octadecanol 112-92-5 (>=1-<2.5)		PNEC = 5.66mg/kg sediment dw			
Dimethylamine 124-40-3 (>=0.1-<0.25)	PNEC = 0.006mg/L	PNEC = 0.33mg/kg sediment dw			

8.2. Exposure controls

Engineering Measures
Use only under a chemical fume hood. 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	Breakthrough time	Glove thickness	EU standard	Glove comments
Nitrile rubber Neoprene Natural rubber PVC	See manufacturers recommendations	-	EN 374	(minimum requirement)

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

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: 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.
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

Environmental exposure controls Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State	Liquid	
Appearance	Light yellow	
Odor	Amine compounds	
Odor Threshold	No data available	
Melting Point/Range	15 - 20 °C / 59 - 68 °F	
Softening Point	No data available	
Boiling Point/Range	347 °C / 656.6 °F	
Flammability (liquid)	No data available	
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	No data available	
Flash Point	155 °C / 311 °F	**Method -** No information available
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	
pH	No information available	
Viscosity	No data available	
Water Solubility	Slightly soluble	
Solubility in other solvents	No information available	

Partition Coefficient (n-octanol/water)

Component	log Pow
1-Octadecanol	7.4

Dimethylamine	-0.274	
Vapor Pressure	<13.3 Pa @ 25 °C	
Density / Specific Gravity	0.800	
Bulk Density	Not applicable	Liquid
Vapor Density	10.26	(Air = 1.0)
Particle characteristics	(liquid) Not applicable	

9.2. Other information

Molecular Formula	C20 H43 N
Molecular Weight	297.57

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

10.4. Conditions to avoid

Incompatible products. Excess heat.

10.5. Incompatible materials

Strong oxidizing agents. copper. Copper alloys. Strong acids. Metals.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO_2). Nitrogen oxides (NOx).

SECTION 11: TOXICOLOGICAL INFORMATION

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

Product Information

(a) acute toxicity;

Oral	Category 4
Dermal	Based on available data, the classification criteria are not met
Inhalation	Based on available data, the classification criteria are not met

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
1-Octadecanamine, N,N-dimethyl-	LD50 = 2116 mg/kg (Rat)	LD50 = 3432 mg/kg (Rabbit)	-
N,N-Dimethyl-1-hexadecylamine	LD50 > 2000 mg/kg (Rat)	LD50 = 4.29 mL/kg (Rabbit)	-
1-Tetradecanamine, N,N-dimethyl-	LD50 = 1320 mg/kg (Rat)	LD50 = 4400 mg/kg (Rabbit)	-
1-Octadecanol	LD50 > 5 g/kg (Rat)	LD50 > 3 g/kg (Rabbit)	-
1-Octadecanamine, N-methyl-N-octadecyl-	LD50 > 5000 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	-

Dimethylamine	LD50 = 698 mg/kg (Rat)	LD50 = 3900 mg/kg (Rat)	LC50 = 7340 ppm (Rat) 20 min

(b) skin corrosion/irritation; Category 1 B

(c) serious eye damage/irritation; Category 1

(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; 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. See actual entry in RTECS for complete information

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

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

12.1. Toxicity

Ecotoxicity effects Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Component	Freshwater Fish	Water Flea	Freshwater Algae
1-Octadecanamine, N,N-dimethyl-	LC50: = 0.18 mg/L, 96h static (Oncorhynchus mykiss)		
N,N-Dimethyl-1-hexadecylamine	LC50: = 0.256 mg/L, 96h		

	semi-static (Danio rerio)		
1-Tetradecanamine, N,N-dimethyl-	LC50: = 0.35 mg/L, 96h static (Danio rerio)		
1-Octadecanol	LC50: > 10000 mg/L, 96h (Brachydanio rerio)	EC50: = 1666 mg/L, 48h (Daphnia magna)	EC50: = 235 mg/L, 96h (Desmodesmus subspicatus)
Dimethylamine	LC50: = 396 mg/L, 96h static (Brachydanio rerio) LC50: 127 - 349 mg/L, 96h semi-static (Poecilia reticulata) LC50: = 210 mg/L, 96h static (Poecilia reticulata) LC50: = 120 mg/L, 96h static (Oncorhynchus mykiss) LC50: 111 - 125 mg/L, 96h (Oncorhynchus mykiss)	EC50: = 88.7 mg/L, 48h (Daphnia magna Straus)	EC50: = 9 mg/L, 96h (Pseudokirchneriella subcapitata)

Component	Microtox	M-Factor
1-Octadecanamine, N,N-dimethyl-		1 (acute) 10 (Chronic)
N,N-Dimethyl-1-hexadecylamine		10 (acute) 1 (Chronic)
1-Tetradecanamine, N,N-dimethyl-		10 (acute) 1 (Chronic)

12.2. Persistence and degradability Readily biodegradable

Degradation in sewage treatment plant Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

12.3. Bioaccumulative potential No information available

Component	log Pow	Bioconcentration factor (BCF)
1-Octadecanol	7.4	No data available
Dimethylamine	-0.274	No data available

12.4. Mobility in soil No information available

12.5. Results of PBT and vPvB assessment Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB).

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 Should not be released into the environment. 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	Do not reuse empty containers. 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	Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Large amounts will affect pH and harm aquatic organisms. Do not let this chemical enter the environment.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

14.1. UN number	UN2735
14.2. UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S.
Technical Shipping Name	N,N-Dimethyloctadecylamine
14.3. Transport hazard class(es)	8
14.4. Packing group	II

ADR

14.1. UN number	UN2735
14.2. UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S.
Technical Shipping Name	N,N-Dimethyloctadecylamine
14.3. Transport hazard class(es)	8
14.4. Packing group	II

IATA

14.1. UN number	UN2735
14.2. UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S.
Technical Shipping Name	N,N-Dimethyloctadecylamine
14.3. Transport hazard class(es)	8
14.4. Packing group	II

14.5. Environmental hazards	Dangerous for the environment Product is a marine pollutant according to the criteria set by IMDG/IMO
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-Octadecanamine, N,N-dimethyl-	124-28-7	204-694-8	-	-	X	X	KE-11574	X	X
N,N-Dimethyl-1-hexadecylamine	112-69-6	203-997-2	-	-	X	X	KE-11451	X	X
N,N-Dimethylicosylamine	45275-74-9	256-216-2	-	-	-	X	-	X	X
1-Tetradecanamine, N,N-dimethyl-	112-75-4	204-002-4	-	-	X	X	KE-11864	X	X
1-Octadecanol	112-92-5	204-017-6	-	-	X	X	KE-26419	X	X
1-Octadecanamine, N-methyl-N-octadecyl-	4088-22-6	223-819-7	-	-	X	X	KE-24524	X	X
Dimethylamine	124-40-3	204-697-4	-	-	X	X	KE-11124	X	X

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
1-Octadecanamine, N,N-dimethyl-	124-28-7	X	ACTIVE	X	-	X	X	X
N,N-Dimethyl-1-hexadecylamine	112-69-6	X	ACTIVE	X	-	X	X	X
N,N-Dimethylicosylamine	45275-74-9	-	-	-	-	-	-	-
1-Tetradecanamine, N,N-dimethyl-	112-75-4	X	ACTIVE	X	-	X	X	X
1-Octadecanol	112-92-5	X	ACTIVE	X	-	X	X	X
1-Octadecanamine, N-methyl-N-octadecyl-	4088-22-6	X	ACTIVE	-	X	X	X	-
Dimethylamine	124-40-3	X	ACTIVE	X	-	X	X	X

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

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
1-Octadecanamine, N,N-dimethyl-	124-28-7	-	-	-
N,N-Dimethyl-1-hexadecylamine	112-69-6	-	-	-
N,N-Dimethylicosylamine	45275-74-9	-	-	-
1-Tetradecanamine, N,N-dimethyl-	112-75-4	-	-	-
1-Octadecanol	112-92-5	-	-	-
1-Octadecanamine, N-methyl-N-octadecyl-	4088-22-6	-	-	-
Dimethylamine	124-40-3	-	Use restricted. See item 75. (see link for restriction details)	-

REACH links
https://echa.europa.eu/substances-restricted-under-reach

Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
1-Octadecanamine, N,N-dimethyl-	124-28-7	Not applicable	Not applicable
N,N-Dimethyl-1-hexadecylamine	112-69-6	Not applicable	Not applicable
N,N-Dimethylicosylamine	45275-74-9	Not applicable	Not applicable
1-Tetradecanamine, N,N-dimethyl-	112-75-4	Not applicable	Not applicable
1-Octadecanol	112-92-5	Not applicable	Not applicable
1-Octadecanamine, N-methyl-N-octadecyl-	4088-22-6	Not applicable	Not applicable
Dimethylamine	124-40-3	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 .
Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

National Regulations

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

WGK Classification Water endangering class = 2 (self classification)

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
1-Octadecanamine, N,N-dimethyl-	WGK3	
N,N-Dimethyl-1-hexadecylamine	WGK3	
1-Tetradecanamine, N,N-dimethyl-	WGK3	
1-Octadecanol	nwg	
1-Octadecanamine, N-methyl-N-octadecyl-	WGK2	
Dimethylamine	WGK1	Class I : 20 mg/m³ (Massenkonzentration)

Component	France - INRS (Tables of occupational diseases)
Dimethylamine	Tableaux des maladies professionnelles (TMP) - RG 49,RG 49bis

15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

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
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

KECL - Korean Existing and Evaluated 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)

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

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards	On basis of test data
Health Hazards	Calculation method
Environmental hazards	Calculation method

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.
Chemical incident response training.

Creation Date	13-Jul-2010
Revision Date	04-Apr-2024
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