

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

Creation Date 21-Apr-2009

Revision Date 29-Sep-2023

Revision Number 8

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

1.1. Product identifier

Product Description: Cat No. : Synonyms CAS No EC No Molecular Formula REACH registration number	<u>Chloroform-d</u> 368980000; 368981000; 368985000 Methane Trichloride-D; Formyl Trichloride-D; Methane-D, Trichloro- 865-49-6 212-742-4 C Cl3 D 01-2120242098-57-0004
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	afety data sheet
Company	
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

Chloroform-d

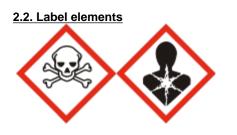
Acute oral toxicity Acute Inhalation Toxicity - Vapors Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Carcinogenicity Reproductive Toxicity Specific target organ toxicity - (single exposure) Specific target organ toxicity - (repeated exposure)

Environmental hazards

Based on available data, the classification criteria are not met

Category 4 (H302) Category 3 (H331) Category 2 (H315) Category 2 (H319) Category 2 (H351) Category 2 (H361d) Category 3 (H336) Category 1 (H372)

Full text of Hazard Statements: see section 16



Signal Word

Danger

Hazard Statements

- H372 Causes damage to organs through prolonged or repeated exposure
- H302 Harmful if swallowed
- H331 Toxic if inhaled
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H336 May cause drowsiness or dizziness
- H351 Suspected of causing cancer
- H361d Suspected of damaging the unborn child

Precautionary Statements

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

- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
- P311 Call a POISON CENTER or doctor/physician
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water
- P280 Wear protective gloves/protective clothing/eye protection/face protection

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

3.1. Substances

Component CA	AS No EC No	Weight %	CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and
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Chloroform-d

Revision Date 29-Sep-2023

				UK SI 2020/1567
Methane-d, trichloro-	865-49-6	EEC No. 212-742-4	>95	Acute Tox. 4 (H302)
				Acute Tox. 3 (H331)
				Skin Irrit. 2 (H315)
				Eye Irrit. 2 (H319)
				STOT SE 3 (H336)
				Carc. 2 (H351)
				Repr. 2 (H361d)
				STOT RE 1 (H372)
Chloroform	67-66-3	200-663-8	-	Acute Tox. 4 (H302)
				Acute Tox. 3 (H331)
				Skin Irrit. 2 (H315)
				Eye Irrit. 2 (H319)
				STOT SE 3 (H336)
				Carc. 2 (H351)
				Repr. 2 (H361d)
				STOT RE 1 (H372)

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Chloroform	STOT RE 2 : C ≥ 5 %	-	-

REACH registration number	01-2120242098-57-0004
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Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of 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. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
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 not breathing, give artificial respiration. 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.
4.2. Most important symptoms and	effects, both acute and delayed
	. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting
4.3. Indication of any immediate me	edical attention and special treatment needed
Notes to Physician	Treat symptomatically. Symptoms may be delayed.

SECTION 5: FIREFIGHTING MEASURES

Chloroform-d

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

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO₂), Phosgene, Chlorine, Hydrogen chloride gas.

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

Should not be released into the environment.

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

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

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. Protect from direct sunlight. Protect from moisture. Store under an inert atmosphere.

Technical Rules for Hazardous Substances (TRGS) 510 Class 6.1C Storage Class (LGK) (Germany)

ACR36898

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
Chloroform	TWA: 2 ppm	TWA: 2 ppm 8 hr	TWA: 2 ppm 8 hr.
	TWA: 9.9 mg/m ³	TWA: 10 mg/m ³ 8 hr	TWA: 9.8 mg/m ³ 8 hr.
	STEL: 6 ppm	Possibility of significant	STEL: 6 ppm 15 min
	STEL: 29.7 mg/m ³	uptake through the skin	STEL: 29.4 mg/m ³ 15 min
	-		Skin

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	Acute effects	Chronic effects local	Chronic effects
	(Dermal)	systemic (Dermal)	(Dermal)	systemic (Dermal)
Chloroform 67-66-3 (-)				DNEL = 0.94mg/kg bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Chloroform 67-66-3 (-)		DNEL = 333mg/m ³	DNEL = 2.5mg/m ³	DNEL = 2.5mg/m ³

Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water	Water Intermittent	Microorganisms in	Soil (Agriculture)
		sediment		sewage treatment	
Chloroform	PNEC = 0.146mg/L	PNEC = 0.45mg/kg	PNEC = 0.133mg/L	PNEC = 0.048mg/L	PNEC = 0.56mg/kg
67-66-3 (-)		sediment dw	-	-	soil dw

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Chloroform	PNEC = 0.015mg/L	PNEC = 0.09mg/kg			
67-66-3 (-)		sediment dw			

8.2. Exposure controls

Chloroform-d

Engineering Measures

Use only under a chemical fume hood. Ensure that evewash 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

u ipment Goggles	(European standard	I - EN 166)	
Protectiv	/e gloves		
Breakthrough time	Glove thickness	EU standard	Glove comments
See manufacturers	-	EN 374	(minimum requirement)
recommendations			
	Goggles Protectiv Breakthrough time See manufacturers	Goggles (European standard Protective gloves Breakthrough time Glove thickness See manufacturers -	Goggles (European standard - EN 166) Protective gloves Breakthrough time See manufacturers Glove thickness - EU standard EN 374

Skin and body protection Long sleeved clothing.

Inspect aloves 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: low boiling organic solvent Type AX Brown conforming to EN371
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	No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State	Liquid	
Appearance	Colorless	
Odor	aromatic	
Odor Threshold	No data available	
Melting Point/Range	-64 °C / -83.2 °F	
Softening Point	No data available	
Boiling Point/Range	60 °C / 140 °F	@ 7
Flammability (liquid)	No data available	
Flammability (solid,gas)	Not applicable	Liqu
Explosion Limits	No data available	·
Flash Point Autoignition Temperature Decomposition Temperature	No information available 982 °C / 1799.6 °F No data available	Metl

760mmHg

uid

thod - No information available

Chloroform-d

рН	No information available
Viscosity	No data available
Water Solubility	8.2 g/L (20°C)
Solubility in other solvents	No information available
Partition Coefficient (n-octanol/wat	er)
Component	log Pow
Methane-d, trichloro-	2
Chloroform	2
Vapor Pressure	211 mbar @ 20 °C
Density / Specific Gravity	1.500
Bulk Density	Not applicable
Vapor Density	No data available
Particle characteristics	Not applicable (liquid)
9.2. Other information	
Molecular Formula	C CI3 D
	120.39
Molecular Weight	120.03

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity	None known, based on information available
10.2. Chemical stability	Light sensitive. Hygroscopic.
10.3. Possibility of hazardous react	tions_
Hazardous Polymerization Hazardous Reactions	Hazardous polymerization does not occur. None under normal processing.
10.4. Conditions to avoid	Incompatible products. Excess heat. Exposure to moist air or water. Protect from light. Keep away from open flames, hot surfaces and sources of ignition.
10.5. Incompatible materials	Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO₂). Phosgene. Chlorine. Hydrogen chloride gas.

Liquid (Air = 1.0)

SECTION 11: TOXICOLOGICAL INFORMATION

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

Product Information

	Common on the		I DEO Dermal	LOCO Inhalatia	
	Dermal Inhalation	Based on available data, the of Category 3	classification criteria are not me	t	
(a)) acute toxicity; Oral	Category 4			

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Chloroform	LD50 = 908 mg/kg (rat)	LD50 > 20 g/kg (Rabbit)	LC50 = 10.5 mg/L (Rat) 4 h

Chloroform-d

LD50 = 695 mg/kg (Rat) LD50 = 450 mg/kg (Rat)	

(b) skin corrosion/irritation;	Category 2
(c) serious eye damage/irritation;	Category 2
(d) respiratory or skin sensitization; Respiratory Skin	No data available No data available
(e) germ cell mutagenicity;	No data available Not mutagenic in AMES Test
(f) carcinogenicity;	Category 2

Limited evidence of a carcinogenic effect The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	EU	UK	Germany	IARC
Chloroform				Group 2B

(g) reproductive toxicity; Reproductive Effects Teratogenicity	Category 2 Experiments have shown reproductive toxicity effects on laboratory animals. Teratogenic effects have occurred in experimental animals.
(h) STOT-single exposure;	Category 3
Results / Target organs	Central nervous system (CNS).
(i) STOT-repeated exposure;	Category 1
Target Organs	Liver, Kidney, Skin, Central nervous system (CNS), Heart, Eyes.
(j) aspiration hazard;	No data available
Other Adverse Effects	Tumorigenic effects have been reported in experimental animals.
Symptoms / effects,both acute and delayed	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

11.2. Information on other hazards

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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

Component	Freshwater Fish	Water Flea	Freshwater Algae
Methane-d, trichloro-	Lepomis macrochirus: LC50: 18	Daphnia magna: EC50: 79	

Chloroform-d

	mg/L/96h Pimephales promelas: LC50: 71 mg/L/96h	mg/LL48h	
Chloroform	LC50: = 300 mg/L, 96h static (Poecilia reticulata) LC50: = 18 mg/L, 96h flow-through (Lepomis macrochirus) LC50: = 18 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: = 71 mg/L, 96h flow-through (Pimephales promelas)	EC50 = 28.9 mg/L/48h	EC50 = 560 mg/L/48h

Component	Microtox	M-Factor
Chloroform	Photobacterium phosphoreum: EC50 = 520 mg/L/5	
	min	
	Photobacterium phosphoreum: EC50 = 670	
	mg/L/15 min	
	Photobacterium phosphoreum: EC50 = 670	
	mg/L/30min	

12.2. Persistence and degradability

Persistence Persistence is unlikely, based on information available.

12.3. Bioaccumulative potential

Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Methane-d, trichloro-	2	No data available
Chloroform	2	1.4 - 13 dimensionless

<u>12.4. Mobility in soil</u>	The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces Will likely be mobile in the environment due to its volatility. Disperses rapidly in air
12.5. Results of PBT and vPvB assessment	Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB).
<u>12.6. Endocrine disrupting</u> properties Endocrine Disruptor Information	This product does not contain any known or suspected endocrine disruptors
12.7 Other adverse effects	

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

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.

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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

Chloroform-d

<u>14.1. UN number</u> 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group	UN1888 Chloroform 6.1 III
ADR	
<u>14.1. UN number</u> 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group	UN1888 Chloroform 6.1 III
IATA	
<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>	UN1888 Chloroform 6.1 III
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
Methane-d, trichloro-	865-49-6	212-742-4	-	-	Х	Х	-	-	-
Chloroform	67-66-3	200-663-8	-	-	Х	Х	Х	Х	Х

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Methane-d, trichloro-	865-49-6	-	-	Х	-	Х	Х	Х
Chloroform	67-66-3	Х	ACTIVE	Х	-	Х	Х	Х

Chloroform-d

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)
Methane-d, trichloro-	865-49-6	-	-	-
Chloroform	67-66-3	-	Use restricted. See item 32. (see http://eur-lex.europa.eu/Le xUriServ/LexUriServ.do?ur i=CELEX:32006R1907:EN: NOT 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
Methane-d, trichloro-	865-49-6	Not applicable	Not applicable
Chloroform	67-66-3	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

Component	ANNEX I - PART 1 List of chemicals subject to export notification procedure (referred to in Article 8)	ANNEX I - PART 2 List of chemicals qualifying for PIC notification (referred to in Article 11)	ANNEX I - PART 3 List of chemicals subject to the PIC procedure (referred to in Articles 13 and 14)
Chloroform 67-66-3 (-)	b — ban (for the category or categories concerned)	-	-
	 b — ban (for the category or categories concerned) 		
	i(2) — industrial chemical for public		

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012R0649&gid=1604065742303.

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

Take note of Directive 94/33/EC on the protection of young people at work

Take note of Dir 92/85/EC on the protection of pregnant and breastfeeding women at work

National Regulations

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

WGK Classification

See table for values

Chloroform-d

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Chloroform	WGK 3	Class I : 20 mg/m ³ (Massenkonzentration)

Component	France - INRS (Tables of occupational diseases)
Chloroform	Tableaux des maladies professionnelles (TMP) - RG 12

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
Chloroform	Prohibited and Restricted		Annex I - industrial chemical
67-66-3 (-)	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

H372 - Causes damage to organs through prolonged or repeated exposure

H302 - Harmful if swallowed

H331 - Toxic if inhaled

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

H351 - Suspected of causing cancer

H361d - Suspected of damaging the unborn child

Legend

CAS - Chemical Abstracts Service

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic 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

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

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

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

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

Substances List

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

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

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)

Chloroform-d

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.

Chemical incident response training.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

Creation Date	21-Apr-2009	
Revision Date	29-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