

according to Regulation (EC) No. 1907/2006

Creation Date 30-Nov-2010 Revision Date 12-Oct-2023 **Revision Number 2** 

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

#### 1.1. Product identifier

**Product Description:** Phosphorus lump, red (metal basis)

474380000 Cat No.: **Synonyms** None 015-002-00-7 **Index No** 7723-14-0 **CAS No** EC No 231-768-7

Molecular Formula **REACH** registration number

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

**Recommended Use** Laboratory chemicals.

SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites Sector of use

PC21 - Laboratory chemicals Product category

**Process categories** PROC15 - Use as a laboratory reagent

Environmental release category ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)

Uses advised against No Information available

## 1.3. Details of the supplier of the safety data sheet

Company

EU entity/business name

Thermo Fisher Scientific

Janssen Pharmaceuticalaan 3a, 2440 Geel,

Belaium

UK entity/business name

Fisher Scientific UK Bishop Meadow Road,

Loughborough, Leicestershire LE11 5RG,

United Kingdom

Swiss distributor - Fisher Scientific AG Neuhofstrasse 11, CH 4153 Reinach

Tel: +41 (0) 56 618 41 11

e-mail - infoch@thermofisher.com

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

customers in Switzerland:

Tox Info Suisse Emergency Number: 145 (24hr)

Tox Info Suisse: +41-44 251 51 51 (Emergency number from abroad)

Chemtrec (24h) Toll-Free: 0800 564 402 Chemtrec Local: +41-43 508 20 11 (Zurich)

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## **SECTION 2: HAZARDS IDENTIFICATION**

## 2.1. Classification of the substance or mixture

## CLP Classification - Regulation (EC) No 1272/2008

#### **Physical hazards**

Flammable solids Category 1 (H228)

## **Health hazards**

Based on available data, the classification criteria are not met

## **Environmental hazards**

Chronic aquatic toxicity Category 3 (H412)

Full text of Hazard Statements: see section 16

#### 2.2. Label elements



Signal Word Danger

## **Hazard Statements**

H228 - Flammable solid

H412 - Harmful to aquatic life with long lasting effects

## **Precautionary Statements**

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

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P273 - Avoid release to the environment

P233 - Keep container tightly closed

## 2.3. Other hazards

In accordance with Annex XIII of the REACH Regulation, inorganic substances do not require assessment

This product does not contain any known or suspected endocrine disruptors

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

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#### Phosphorus lump, red (metal basis)

#### 3.1. Substances

Component	CAS No	EC No	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Phosphorus elemental	7723-14-0	EEC No. 231-768-7	>95	Flam. Sol. 1 (H228) Aguatic Chronic 3 (H412)

REACH registration number -

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.

**Ingestion** Never give anything by mouth to an unconscious person. Drink plenty of water. Induce

vomiting, but only if victim is fully conscious. Call a physician immediately. Get medical

attention.

**Inhalation** Remove from exposure, lie down. Remove to fresh air.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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

No information available.

## 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

Dry chemical, soda ash, lime or sand.

## Extinguishing media which must not be used for safety reasons

Carbon dioxide (CO<sub>2</sub>).

## 5.2. Special hazards arising from the substance or mixture

Combustible material.

## **Hazardous Combustion Products**

Oxides of phosphorus, Phosphorus trihydride (phosphine).

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## 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. Avoid release to the environment. Collect spillage. Do not flush into surface water or sanitary sewer system.

#### 6.3. Methods and material for containment and cleaning up

Avoid dust formation. Use spark-proof tools and explosion-proof equipment. Provide adequate ventilation. Sweep up and shovel into suitable 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. Avoid breathing vapors or mists. Do not ingest. If swallowed then seek immediate medical assistance. Handle product only in closed system or provide appropriate exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do 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. Keep away from heat, sparks and flame. Flammables area. Keep away from oxidizing agents.

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

Storage Class/LGK 4.1B

Switzerland - Storage of hazardous substances

Storage class - SC 4.1 https://www.kvu.ch/de/themen/stoffe-und-produkte

https://www.kvu.ch/fr/themes/substances-et-produits https://www.kvu.ch/it/temi/sostanze-e-prodotti

## 7.3. Specific end use(s)

Use in laboratories

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

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## 8.1. Control parameters

## **Exposure limits**

List source(s):

Compo	nent	European Union	The United Kingdom	France	Belgium	Spain
Phosph	norus				TWA: 0.02 ppm 8 uren	
eleme	ntal				TWA: 0.1 mg/m <sup>3</sup> 8 uren	

Component	Italy	Germany	Portugal	The Netherlands	Finland
Phosphorus		TWA: 0.01 mg/m <sup>3</sup> (8			
elemental		Stunden). MAK			
		Höhepunkt: 0.02 mg/m <sup>3</sup>			

Component	Austria	Denmark	Switzerland	Poland	Norway
Phosphorus	MAK-KZGW: 0.2 mg/m <sup>3</sup>				TWA: 0.1 mg/m <sup>3</sup> 8 timer
elemental	15 Minuten				STEL: 0.3 mg/m <sup>3</sup> 15
	MAK-TMW: 0.1 mg/m <sup>3</sup> 8				minutter. value
	Stunden				calculated

Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Phosphorus		TWA-GVI: 0.1 mg/m <sup>3</sup> 8			TWA: 0.1 mg/m <sup>3</sup> 8
elemental	satima.				hodinách.
	STEL-KGVI: 0.3 ppm 15				Ceiling: 0.3 mg/m <sup>3</sup>
		minutama.			,

	Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Γ	Phosphorus	TWA: 0.1 mg/m <sup>3</sup> 8		STEL: 0.3 mg/m <sup>3</sup>	STEL: 0.1 mg/m <sup>3</sup> 15	
	elemental	tundides.		TWA: 0.1 mg/m <sup>3</sup>	percekben. CK	
					TWA: 0.1 mg/m <sup>3</sup> 8	
L					órában. AK	

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Phosphorus elemental	TWA: 0.03 mg/m <sup>3</sup>				TWA: 0.05 mg/m³ 8 ore STEL: 0.15 mg/m³ 15 minute

Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Phosphorus		Ceiling: 0.1 mg/m <sup>3</sup>			
elemental		TWA: 0.05 mg/m <sup>3</sup> dust			

## **Biological limit values**

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

## **Monitoring methods**

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

## Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

Workers; See table for values

	Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
	Phosphorus elemental				DNEL = 30mg/kg
1	7723-14-0 ( >95 )				bw/dav

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Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Phosphorus elemental 7723-14-0 ( >95 )				DNEL = 4mg/m <sup>3</sup>

#### Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water	Water Intermittent	Microorganisms in	Soil (Agriculture)
		sediment		sewage treatment	
Phosphorus elemental	PNEC = 10.5µg/L	PNEC = 100mg/kg	PNEC = 105µg/L	PNEC = 10mg/L	PNEC = 12.5 mg/kg
7723-14-0 (>95)		sediment dw			soil dw

Component	Marine water	Marine water sediment	Marine water Intermittent	Food chain	Air
Phosphorus elemental 7723-14-0 ( >95 )	PNEC = 1.05μg/L	PNEC = 10mg/kg sediment dw			

#### 8.2. Exposure controls

#### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas.

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** 

Wear safety glasses with side shields (or goggles) Goggles (European standard - EN 166)

**Hand Protection** Protective gloves

Γ	Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
1	Natural rubber	See manufacturers	-	EN 374	(minimum requirement)
1	Nitrile rubber	recommendations			
ı	Neoprene				
1	PVC				

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Inspect gloves before use, observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) 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, gloves with care avoiding skin contamination.

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline **Respiratory Protection** 

respirator in the positive pressure mode with emergency escape provisions.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

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and maintained properly

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits Large scale/emergency use

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Particulates filter conforming to EN 143

Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure Small scale/Laboratory use

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

Prevent product from entering drains. **Environmental exposure controls** 

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Solid

## 9.1. Information on basic physical and chemical properties

**Physical State** Solid

Dark red **Appearance** Odor Slight

**Odor Threshold** No data available 590 °C / 1094 °F **Melting Point/Range** Softening Point No data available **Boiling Point/Range** No information available

Flammability (liquid) Not applicable

Flammability (solid,gas) No information available

**Explosion Limits** No data available

**Flash Point** No information available Method - No information available

215 °C **Autoignition Temperature** 300°C **Decomposition Temperature** 

pН

No information available Not applicable

Viscosity Solid

**Water Solubility** Insoluble

No information available Solubility in other solvents

Partition Coefficient (n-octanol/water)

**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 Formula Molecular Weight** 30.96

Flammable solids Burning rate or burning time = > 2.2 mm/s or < 45 secs

Wetted zone passed - Yes

Not applicable - Solid **Evaporation Rate** 

## **SECTION 10: STABILITY AND REACTIVITY**

10.1. Reactivity

No

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No information available. **Hazardous Polymerization Hazardous Reactions** No information available.

10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition. Excess heat. Exposure

to light. Incompatible products.

10.5. Incompatible materials

Halogens. Metals. copper. Oxidizing agent.

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## 10.6. Hazardous decomposition products

Oxides of phosphorus. Phosphorus trihydride (phosphine).

## SECTION 11: TOXICOLOGICAL INFORMATION

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

#### **Product Information**

(a) acute toxicity;

OralBased on available data, the classification criteria are not metDermalBased on available data, the classification criteria are not metInhalationBased on available data, the classification criteria are not met

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Phosphorus elemental	>15000 mg/kg (Rat Female)	-	LC50 = 4.3 mg/L (Rat) 1 h

(b) skin corrosion/irritation; Based on available data, the classification criteria are not met

(c) serious eye damage/irritation; Based on available data, the classification criteria are not met

(d) respiratory or skin sensitization;

**Respiratory**Based on available data, the classification criteria are not met **Skin**Based on available data, the classification criteria are not met

(e) germ cell mutagenicity; Based on available data, the classification criteria are not met

(f) carcinogenicity; Based on available data, the classification criteria are not met

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; Based on available data, the classification criteria are not met

(h) STOT-single exposure; Based on available data, the classification criteria are not met

(i) STOT-repeated exposure; Based on available data, the classification criteria are not met

Target Organs None known.

(j) aspiration hazard; Not applicable

Solid

Other Adverse Effects See actual entry in RTECS for complete information

Symptoms / effects,both acute and No information available.

delayed

## 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** Harmful 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
Phosphorus elemental	LC50: 33.2 mg/L/96h (Danio	EC50: 10.5 mg/L/48h	
·	rerio)	-	

**12.2. Persistence and degradability** Not readily biodegradable

**Persistence** 

Insoluble in water.

Degradability

Not relevant for inorganic substances.

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

May have some potential to bioaccumulate

Component	log Pow	Bioconcentration factor (BCF)
Phosphorus elemental		<200 dimensionless

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

assessment

In accordance with Annex XIII of the REACH Regulation, inorganic substances do not

require 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 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.

**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. Do not let this

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chemical enter the environment.

**Switzerland - Waste Ordinance** 

Disposal should be in accordance with applicable regional, national and local laws and regulations. Ordinance on the Avoidance and the Disposal of Waste (Waste Ordinance,

ADWO) SR 814.600

https://www.fedlex.admin.ch/eli/cc/2015/891/en

## **SECTION 14: TRANSPORT INFORMATION**

#### IMDG/IMO

**14.1. UN number** UN1338

14.2. UN proper shipping name PHOSPHORUS, AMORPHOUS

14.3. Transport hazard class(es) 4.1 14.4. Packing group III

## ADR

**14.1. UN number** UN1338

14.2. UN proper shipping name PHOSPHORUS, AMORPHOUS

14.3. Transport hazard class(es) 4.1 14.4. Packing group III

## IATA

**14.1. UN number** UN1338

14.2. UN proper shipping name PHOSPHORUS, AMORPHOUS

14.3. Transport hazard class(es) 4.1 14.4. Packing group 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
Phosphorus elemental	7723-14-0	231-768-7	-	-	Х	Х	KE-28713	Х	-

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Phosphorus elemental	7723-14-0	X	ACTIVE	X	-	X	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

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Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Phosphorus elemental	7723-14-0	-	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) -	Seveso III Directive (2012/18/EC) -
		Qualifying Quantities for Major Accident	Qualifying Quantities for Safety Report
		Notification	Requirements
Phosphorus elemental	7723-14-0	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 = 1 (self classification)

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Phosphorus elemental	WGK1	

Component	France - INRS (Tables of occupational diseases)
Phosphorus elemental	Tableaux des maladies professionnelles (TMP) - RG 5

## **Swiss Regulations**

Article 4 para. 4 of the Ordinance on the protection of young people in the workplace (SR 822.115) and Article 1 lit. f of the EAER regulation on hazardous work and young people (SR 822.115.2).

Take note on Article 13 Maternity Ordinance (SR 822.111.52) with regards expectant and nursing mothers.

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
Phosphorus elemental	Prohibited and Restricted		
7723-14-0 ( >95 )	Substances		

#### 15.2. Chemical safety assessment

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

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## **SECTION 16: OTHER INFORMATION**

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

H228 - Flammable solid

H412 - Harmful to aquatic life with long lasting effects

#### Legend

**CAS** - Chemical Abstracts Service

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

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

I **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances **IECSC** - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances

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)

## 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 Date30-Nov-2010Revision Date12-Oct-2023Revision SummaryNot applicable.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No. 1907/2006

For Switzerland - Compiled in accordance with the technical provisions referred to in Annex 2, Number 3, ChemO (SR 813.11 - Ordinance on Protection against Dangerous Substances and Preparations).

## 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

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# **End of Safety Data Sheet**