

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

Creation Date 26-Aug-2009 Revision Date 21-Sep-2023 Revision Number 8

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

#### 1.1. Product identifier

Product Description: <u>Methyl chloroacetate</u>

Cat No. : 148630000; 148630010; 148630025; 148630100

 Index No
 607-205-00-X

 CAS No
 96-34-4

 EC No
 202-501-1

 Molecular Formula
 C3 H5 Cl O2

 REACH registration number
 01-2119432124-53

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

Recommended Use Laboratory chemicals.

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

**Product category** PC21 - Laboratory chemicals

**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

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** 

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| Flammable liquids  | Category 3 (H226)   |
|--|---|
| Health hazards   |   |
| Acute oral toxicity Acute dermal toxicity Acute Inhalation Toxicity - Vapors Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Skin Sensitization Specific target organ toxicity - (single exposure) | Category 3 (H301) Category 2 (H310) Category 2 (H330) Category 2 (H315) Category 1 (H318) Category 1 (H317) Category 3 (H335) |
| Environmental hazards  |   |
| Acute aquatic toxicity   | Category 1 (H400)   |

Full text of Hazard Statements: see section 16

#### 2.2. Label elements



## Signal Word

Danger

#### **Hazard Statements**

- H226 Flammable liquid and vapor
- H301 Toxic if swallowed
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H318 Causes serious eye damage
- H335 May cause respiratory irritation
- H400 Very toxic to aquatic life
- H310 + H330 Fatal in contact with skin or if inhaled

## **Precautionary Statements**

- P310 Immediately call a POISON CENTER or doctor/physician
- P304 + P340 IF INHALED: Remove person to fresh air and keep 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
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

## 2.3. Other hazards

Lachrymator (substance which increases the flow of tears)

This product does not contain any known or suspected endocrine disruptors

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

#### 3.1. Substances

| Component              | CAS No  | EC No             | Weight % | CLP Classification - According to<br>GB-CLP Regulations UK SI 2019/720 and<br>UK SI 2020/1567 |
|------------------------|---------|-------------------|----------|---|
| Methyl chloroacetate   | 96-34-4 | EEC No. 202-501-1 | >95      | Acute Tox. 3 (H301)   |
| Wellityl Chloroacetate | 30-34-4 | LLC No. 202-301-1 | >95      | Acute Tox. 3 (1301) Acute Tox. 2 (H330)   |
|                        |         |                   |          | Skin Irrit. 2 (H315)  |
|                        |         |                   |          | ` '   |
|                        |         |                   |          | Eye Dam. 1 (H318)   |
|                        |         |                   |          | STOT SE 3 (H335)  |
|                        |         |                   |          | Flam. Liq. 3 (H226)   |
|                        |         |                   |          | Acute Tox. 2 (H310)   |
|                        |         |                   |          | Skin Sens. 1 (H317)   |
|                        |         |                   |          | Aquatic Acute 1 (H400)  |

| Component            | Specific concentration limits (SCL's) | M-Factor | Component notes |  |
|----------------------|---------------------------------------|----------|-----------------|--|
| Methyl chloroacetate | -                                     | 1        | -               |  |

| REACH registration number | 01-2119432124-53 |
|---------------------------|------------------|
|---------------------------|------------------|

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 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 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

. Causes severe eye damage. May cause allergic skin reaction. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

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

Notes to Physician Treat symptomatically.

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## **SECTION 5: FIREFIGHTING MEASURES**

## 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

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

No information available.

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

Flammable. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air. Do not allow run-off from fire-fighting to enter drains or water courses.

#### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Phosgene, 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. Remove all sources of ignition. Take precautionary measures against static discharges.

#### 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.

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

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

#### 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

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges.

#### **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 away from heat, sparks and flame. Flammables area. Keep container tightly closed in a dry and well-ventilated place.

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

Class 3

#### 7.3. Specific end use(s)

Use in laboratories

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

#### 8.1. Control parameters

#### **Exposure limits**

List source(s):

#### **Biological limit values**

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

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

No information available

## **Predicted No Effect Concentration (PNEC)**

No information available.

#### 8.2. Exposure controls

## **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting equipment.

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

| Γ | Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments        |
|---|----------------|-------------------|-----------------|-------------|-----------------------|
| ١ | Nitrile rubber | See manufacturers |                 | EN 374      | (minimum requirement) |
| l | Neoprene       | recommendations   |                 |             |                       |

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Natural rubber - PVC

Skin and body protection Long sleeved clothing.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

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

and maintained properly

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

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: 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 Colorless

Odor
Odor Threshold
No data available
Melting Point/Range
Softening Point
No data available
No data available
No data available

Boiling Point/Range 130 - 132 °C / 266 - 269.6 °F

Flammability (liquid) Flammable On basis of test data

Flammability (solid,gas) Not applicable Liquid

Explosion Limits Lower 4.8 Vol% Upper 18.5 Vol%

Flash Point 47 °C / 116.6 °F Method - No information available

Autoignition Temperature
Decomposition Temperature
pH
No data available
No information available
1.23 mPa.s (20°C)
Water Solubility
28 g/L (20°C)

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Componentlog PowMethyl chloroacetate0,63

Vapor Pressure 6.5 mbar @ 20 °C

Density / Specific Gravity 1.230

Bulk Density Not applicable Liquid

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Vapor Density No data available (Air = 1.0)

Particle characteristics Not applicable (liquid)

9.2. Other information

Molecular Formula C3 H5 Cl O2 Molecular Weight 108.52

**Explosive Properties** explosive air/vapour mixtures possible

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

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

Heat, flames and sparks. Keep away from open flames, hot surfaces and sources of ignition. Exposure to light. Incompatible products. Exposure to moist air or water.

10.5. Incompatible materials

Reducing Agent. Strong acids. Strong bases. Aluminium. copper. Oxidizing agent.

10.6. Hazardous decomposition products

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

## **SECTION 11: TOXICOLOGICAL INFORMATION**

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

#### **Product Information**

(a) acute toxicity;

OralCategory 3DermalCategory 2InhalationCategory 2

| Component            | LD50 Oral              | LD50 Dermal               | LC50 Inhalation             |
|----------------------|------------------------|---------------------------|-----------------------------|
| Methyl chloroacetate | LD50 = 107 mg/kg (Rat) | LD50 = 318 mg/kg (Rabbit) | LC50 = 210 ppm (Rat) 4h     |
| -                    |                        | LD50 = 137 mg/kg (Rat)    | LC50 = 0,638  mg/L/4h (Rat) |

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

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

Skin Category 1

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May cause sensitization by skin contact

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

(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; Category 3

Respiratory system. Results / Target organs

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

None known. **Target Organs** 

(j) aspiration hazard; Based on available data, the classification criteria are not met

delayed

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

#### 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** The product contains following substances which are hazardous for the environment. Very

toxic to aquatic organisms.

| Component            | Freshwater Fish                                   | Water Flea | Freshwater Algae |
|----------------------|---|------------|------------------|
| Methyl chloroacetate | LC50: = 1.13 mg/L, 96h static (Brachydanio rerio) |            |                  |
|                      |   |            |                  |

| Component            | Microtox | M-Factor |
|----------------------|----------|----------|
| Methyl chloroacetate |          | 1        |

12.2. Persistence and degradability Readily biodegradable

**Persistence** 

based on information available, May persist.

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) |
|----------------------|---------|-------------------------------|
| Methyl chloroacetate | 0,63    | No data available             |

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12.4. Mobility in soil

The product is water soluble, and may spread in water systems. Will likely be mobile in the

environment due to its water solubility. Highly mobile in soils: Is not likely mobile in the

environment due its low water solubility and propensity to bind to soil particles

12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Endocrine disrupting

properties

Endocrine Disruptor Information This pr

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. Empty containers

retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and

empty container away from heat and sources of ignition.

**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. Can be landfilled or incinerated, when in compliance with local regulations. Do not empty into drains. Do not let this chemical enter

the environment.

## **SECTION 14: TRANSPORT INFORMATION**

#### IMDG/IMO

**14.1. UN number** UN2295

14.2. UN proper shipping name METHYL CHLOROACETATE

14.3. Transport hazard class(es)6.1Subsidiary Hazard Class314.4. Packing groupI

ADR

<u>14.1. UN number</u> UN2295

14.2. UN proper shipping name METHYL CHLOROACETATE

14.3. Transport hazard class(es) 6.1 Subsidiary Hazard Class 3 14.4. Packing group I

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IATA FORBIDDEN FOR IATA TRANSPORT

**14.1. UN number** UN2295

14.2. UN proper shipping name METHYL CHLOROACETATE FORBIDDEN FOR IATA TRANSPORT

14.3. Transport hazard class(es) 6.1 Subsidiary Hazard Class 3 14.4. Packing group I

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 Not applicable, packaged goods

according to IMO instruments

## **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  |
|----------------------|---------|-----------|---------|---------|-------|------|----------|-------|-------|
| Methyl chloroacetate | 96-34-4 | 202-501-1 | ı       | -       | X     | Χ    | KE-05494 | Χ     | Χ     |
|                      |         |           |         |         |       |      |          |       |       |
| Component            | CAS No  | TSCA      | TSCA Ir | ventory | DSL   | NDSL | AICS     | NZIoC | PICCS |

| Component            | CAS No  | TSCA | TSCA Inventory<br>notification -<br>Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|----------------------|---------|------|---|-----|------|------|-------|-------|
| Methyl chloroacetate | 96-34-4 | X    | ACTIVE  | Х   | ı    | 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) -<br>Annex XIV - Substances<br>Subject to Authorization |  | REACH Regulation (EC<br>1907/2006) article 59 -<br>Candidate List of<br>Substances of Very High<br>Concern (SVHC) |
|----------------------|---------|---|--|---|
| Methyl chloroacetate | 96-34-4 | -   | Use restricted. See item<br>75.<br>(see link for restriction<br>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 Notification | Requirements                        |
| Methyl chloroacetate | 96-34-4 | 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

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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** See table for values

| Component            | Germany - Water Classification (AwSV) | Germany - TA-Luft Class                 |
|----------------------|---------------------------------------|---|
| Methyl chloroacetate | WGK3                                  | Class I: 20 mg/m³ (Massenkonzentration) |

#### 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

H301 - Toxic if swallowed

H310 - Fatal in contact with skin

H330 - Fatal if inhaled

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H335 - May cause respiratory irritation

H400 - Very toxic to aquatic life

H226 - Flammable liquid and vapor

#### Legend

**CAS** - Chemical Abstracts Service

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

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

Substances List

**ENCS** - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

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**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

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**Training Advice** 

Chemical incident response training.

Creation Date26-Aug-2009Revision Date21-Sep-2023Revision SummaryNot applicable.

Transport Association

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Assta Taxisity Fatigate

ICAO/IATA - International Civil Aviation Organization/International Air

ATE - Acute Toxicity Estimate
VOC - (Volatile Organic Compound)

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**