

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

Revision Date 18-Mar-2024 Revision Number 5

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

1.1. Product identifier

Product Description: <u>Tenacity No 125 Paste</u>

Cat No.: 98531

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

Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific)

Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom

Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608

**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

Acute dermal toxicity

Acute Inhalation Toxicity - Dusts and Mists

Reproductive Toxicity

Category 4 (H302)

Category 4 (H312)

Category 3 (H331)

Category 1B (H360FD)

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#### **Environmental hazards**

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

### 2.2. Label elements



### Signal Word

### Danger

#### **Hazard Statements**

H302 + H312 - Harmful if swallowed or in contact with skin

H331 - Toxic if inhaled

H360FD - May damage fertility. May damage the unborn child

### **Precautionary Statements**

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

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

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P311 - Call a POISON CENTER or doctor/physician

#### Additional EU labelling

Restricted to professional users

### 2.3. Other hazards

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
Boric acid (H3BO3)	10043-35-3	233-139-2	50.0	Repr. 1B (H360FD)
Potassium silicofluoride	16871-90-2	EEC No. 240-896-2	20.0	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331)
Boron potassium oxide (B4K2O7)	1332-77-0	EEC No. 215-575-5	15.0	Repr. 2 (H361d)
Water	7732-18-5	231-791-2	10.0	-
Borates, tetra, sodium salts, decahydrate	1303-96-4	215-540-4	5.0	Eye Irrit. 2 (H319) Repr. 1B (H360FD)

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Boron potassium oxide (B4K2O7)	Repr. 2 : C ≥ 5.2 %	=	-

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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** If symptoms persist, call a physician.

**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 plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

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

None reasonably foreseeable.

### 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**

Not combustible. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

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

No information available.

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

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

#### **Hazardous Combustion Products**

Potassium oxides, Hydrogen fluoride, Oxides of boron, Silicon dioxide, Sodium oxides.

### 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. Use personal protective equipment as required. Avoid dust formation.

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#### 6.2. Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

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

Sweep up and shovel into suitable containers for disposal. 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. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

#### **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 container tightly closed in a dry and well-ventilated place.

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

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

Use in laboratories

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

### 8.1. Control parameters

#### **Exposure limits**

List source(s): **IRE -** 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020.

Component	The United Kingdom	European Union	Ireland
Boric acid (H3BO3)			TWA: 2 mg/m <sup>3</sup> 8 hr.
			STEL: 6 mg/m <sup>3</sup> 15 min
Borates, tetra, sodium salts, decahydrate	STEL: 15 mg/m <sup>3</sup> 15 min		TWA: 5 mg/m <sup>3</sup> 8 hr.
	TWA: 5 mg/m <sup>3</sup> 8 hr		STFL: 6 mg/m <sup>3</sup> 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

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Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Boric acid (H3BO3)				DNEL = 392mg/kg
10043-35-3 ( 50.0 )				bw/day

Component	Acute effects local	Acute effects	Chronic effects local	Chronic effects
	(Inhalation)	systemic (Inhalation)	(Inhalation)	systemic (Inhalation)
Boric acid (H3BO3)				$DNEL = 8.3 mg/m^3$
10043-35-3 ( 50.0 )				-
Potassium silicofluoride	$DNEL = 2.5 mg/m^3$	DNEL = 2.5mg/m <sup>3</sup>	DNEL = 2.5mg/m <sup>3</sup>	$DNEL = 2.5mg/m^3$
16871-90-2 ( 20.0 )	-	_		
Borates, tetra, sodium salts,	22.3 mg/m <sup>3</sup>		22.3 mg/m <sup>3</sup>	12.76 mg/m <sup>3</sup>
decahydrate				_
1303-96-4 ( 5.0 )				

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

See values below.

Component	Fresh water	Fresh water	Water Intermittent	Microorganisms in	Soil (Agriculture)
		sediment		sewage treatment	
Boric acid (H3BO3) 10043-35-3 ( 50.0 )	PNEC = 2.9mg/L		PNEC = 13.7mg/L	PNEC = 10mg/L	PNEC = 5.7mg/kg soil dw
Potassium silicofluoride 16871-90-2 ( 20.0 )	PNEC = 0.9mg/L			PNEC = 51mg/L	PNEC = 11mg/kg soil dw
Borates, tetra, sodium salts, decahydrate 1303-96-4 ( 5.0 )	2.02 mg/L		13.7 mg/L	10 mg/L	5.4 mg/kg

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Boric acid (H3BO3) 10043-35-3 ( 50.0 )	PNEC = 2.9mg/L				
Potassium silicofluoride 16871-90-2 ( 20.0 )	PNEC = 0.9mg/L				
Borates, tetra, sodium salts, decahydrate 1303-96-4 ( 5.0 )	2.02 mg/L				

### 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) (European standard - EN 166)

Hand Protection Protective gloves

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

**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.

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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.

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

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: Particulates filter conforming to EN 143

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:- Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted

No information available. **Environmental exposure controls** 

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

### 9.1. Information on basic physical and chemical properties

**Physical State Paste** 

**Appearance** 

No information available Odor **Odor Threshold** No data available No data available **Melting Point/Range** No data available **Softening Point Boiling Point/Range** No information available Flammability (liquid) No data available Flammability (solid,gas) No information available No data available **Explosion Limits** 

Flash Point No information available Method - No information available

**Autoignition Temperature** No data available No data available **Decomposition Temperature** No information available pН

Viscosity Not applicable

Solid

**Water Solubility** Partially soluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow Boric acid (H3BO3) -0.757Borates, tetra, sodium salts, - 0.757

decahydrate

**Vapor Pressure** No data available **Density / Specific Gravity** No data available **Bulk Density** No data available **Vapor Density** Not applicable

No data available Particle characteristics

9.2. Other information

**Evaporation Rate** Not applicable - Solid

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

Solid

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10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Hazardous PolymerizationNo information available.Hazardous ReactionsNone under normal processing.

10.4. Conditions to avoid

Incompatible products. Excess heat.

10.5. Incompatible materials

Acids. Oxidizing agent.

### 10.6. Hazardous decomposition products

Potassium oxides. Hydrogen fluoride. Oxides of boron. Silicon dioxide. Sodium oxides.

### **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 Category 4
Inhalation Category 3

#### Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Boric acid (H3BO3)	2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	Not listed
Potassium silicofluoride	LD50 = 156 mg/kg (Rat)	-	-
Boron potassium oxide (B4K2O7)	-	LD50 > 2000 mg/kg (Rabbit)	LC50 > 2.04 mg/L (Rat) 4 h
Water	-	-	-
Borates, tetra, sodium salts, decahydrate	5660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	2.03 mg/l (Rat)

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

Component	Test method	Test species	Study result
Borates, tetra, sodium salts, decahydrate	OECD Test Guideline 406	guinea pig	non-sensitising
1303-96-4 ( 5.0 )			

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

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(g) reproductive toxicity; Category 1B

Component	Test method	Test species / Duration	Study result
Borates, tetra, sodium salts, decahydrate	OECD Test Guideline 416	Rat	NOAEL = 9.6 mg/kg
1303-96-4 ( 5.0 )			
` ,	OECD Test Guideline 414		NOAEL =
			17.5
			mg/kg

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs None known.

(j) aspiration hazard; Not applicable

Solid

Symptoms / effects,both acute and No information available.

delayed

### 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

Freshwater Fish Component Water Flea Freshwater Algae Boric acid (H3BO3) Gambusia affinis: LC50: 5600 EC50: 115 - 153 mg/L, 48h mg/L/96h (Daphnia magna) 340 mg/L LC50 96 h 1085 - 1402 mg/L LC50 48 h 2.6-21.8 mg/L EC50 96h Borates, tetra, sodium salts, decahydrate 708 mg/l LC50 96 h (Pimephales 158 mg/L EC50 = 96h promelas)

Component	Microtox	M-Factor
Boric acid (H3BO3)	-	
Borates, tetra, sodium salts, decahydrate	-	

12.2. Persistence and degradability No information available

**Degradability** Not relevant for inorganic substances.

### **12.3. Bioaccumulative potential** No information available

Component	log Pow	Bioconcentration factor (BCF)
Boric acid (H3BO3)	-0.757	0 dimensionless
Borates, tetra, sodium salts, decahydrate	- 0.757	No data available

12.4. Mobility in soil No information available

**12.5. Results of PBT and vPvB** No data available for assessment.

assessment

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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 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 Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

ADR Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

IATA Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

**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**

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

### **International Inventories**

China, X = listed, Australia, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS), Taiwan (TCSI), Japan (ISHL), New Zealand (NZIoC), Japan (ISHL). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Boric acid (H3BO3)	10043-35-3	233-139-2	ı	-	Х	X	KE-03499	X	Х
Potassium silicofluoride	16871-90-2	240-896-2	-	-	Х	Х	KE-12160	X	Х
Boron potassium oxide (B4K2O7)	1332-77-0	215-575-5	-	-	Х	Х	KE-12187	-	-
Water	7732-18-5	231-791-2	-	-	Х	Х	KE-35400	X	-
Borates, tetra, sodium salts, decahvdrate	1303-96-4	215-540-4	-	-	Х	Х	KE-03483	Х	Х

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Boric acid (H3BO3)	10043-35-3	Х	ACTIVE	X	ı	X	Χ	X
Potassium silicofluoride	16871-90-2	X	ACTIVE	X	ı	X	Х	Х
Boron potassium oxide (B4K2O7)	1332-77-0	Х	ACTIVE	X	ı	X	Х	X
Water	7732-18-5	X	ACTIVE	X	ı	X	Х	X
Borates, tetra, sodium salts, decahydrate	1303-96-4	X	ACTIVE	X	-	Х	Х	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)
Boric acid (H3BO3)	10043-35-3	-	Use restricted. See item 30. (see link for restriction details) Use restricted. See item 75. (see link for restriction details)	SVHC Candidate list - 233-139-2 - Toxic for reproduction, Article 57c
Potassium silicofluoride	16871-90-2	-	-	-
Boron potassium oxide (B4K2O7)	1332-77-0	-	Use restricted. See item 75. (see link for restriction details)	-
Water	7732-18-5	-	-	-
Borates, tetra, sodium salts, decahydrate	1303-96-4	-	Use restricted. See item 30. (see link for restriction details) Use restricted. See item 75. (see link for restriction details)	SVHC Candidate list - 603-411-9 - Toxic for reproduction, Article 57c

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

### **REACH links**

https://echa.europa.eu/authorisation-list

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

https://echa.europa.eu/candidate-list-table

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### Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident	
		Notification	Requirements
Boric acid (H3BO3)	10043-35-3	Not applicable	Not applicable
Potassium silicofluoride	16871-90-2	Not applicable	Not applicable
Boron potassium oxide (B4K2O7)	1332-77-0	Not applicable	Not applicable
Water	7732-18-5	Not applicable	Not applicable
Borates, tetra, sodium salts, decahydrate	1303-96-4	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

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 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**

Water endangering class = 2 (self classification)

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Boric acid (H3BO3)	WGK1	
Potassium silicofluoride	WGK2	
Boron potassium oxide (B4K2O7)	WGK1	
Borates, tetra, sodium salts, decahydrate	WGK1	

### 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

H301 - Toxic if swallowed

H302 - Harmful if swallowed

H311 - Toxic in contact with skin

H312 - Harmful in contact with skin

H319 - Causes serious eye irritation

H331 - Toxic if inhaled

H360FD - May damage fertility. May damage the unborn child

H361d - Suspected of damaging the unborn child

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#### Legend

**CAS** - Chemical Abstracts Service

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

**ENCS** - Japanese Existing and New Chemical Substances

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

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

Substances List

TWA - Time Weighted Average IARC - International Agency for Research on Cancer

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

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

ATE - Acute Toxicity Estimate

VOC - (Volatile Organic Compound)

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.

Health, Safety and Environmental Department Prepared By

**Revision Date** 18-Mar-2024

**Revision Summary** New emergency telephone response service provider.

### 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**