

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

Revision Date 19-Mar-2024 Revision Number 3

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

1.1. Product identifier

Product Description: Paraformaldehyde fixative solution

Cat No. : J61984

Unique Formula Identifier (UFI) 63PM-C6W1-UX0S-7NFC

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

Poison Centre - Emergency

information services

Ireland: National Poisons Information Centre (NPIC) -

**01 809 2166** (8am-10pm, 7 days a week)

Malta: +356 2395 2000 Cyprus: +357 2240 5611

# **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**

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Serious Eye Damage/Eye Irritation Skin Sensitization Carcinogenicity Category 1 (H318) Category 1 (H317) Category 2 (H351)

# **Environmental hazards**

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16





Signal Word

**Danger** 

#### **Hazard Statements**

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H351 - Suspected of causing cancer

#### **Precautionary Statements**

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

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

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

#### 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
Water	7732-18-5	231-791-2	92.4052	-
Paraformaldehyde	30525-89-4		3.7	Flam. Sol. 2 (H228) Acute Tox. 4 (H302) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) STOT SE 3 (H335) Carc. 2 (H351)

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Sucrose 57-50-1 EEC No. 200-334-9 3.0 Sodium chloride 7647-14-5 231-598-3 0.7464 7558-79-4 231-448-7 0.1064 Sodium phosphate dibasic 7778-77-0 231-913-4 Dihydrogen potassium phosphate 0.0233 Potassium chloride 7447-40-7 231-211-8 0.0187

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.

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

Causes severe eye damage. Causes eye burns. May cause allergic skin reaction.

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.

# **SECTION 5: FIREFIGHTING MEASURES**

#### 5.1. Extinguishing media

#### Suitable Extinguishing Media

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**

None under normal use conditions.

#### Paraformaldehyde fixative solution

#### 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.

#### 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

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. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

#### **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 12 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): **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

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Component	The United Kingdom	European Union	Ireland
Sucrose	STEL: 20 mg/m <sup>3</sup> 15 min		TWA: 10 mg/m <sup>3</sup> 8 hr.
	TWA: 10 mg/m <sup>3</sup> 8 hr		STEL: 20 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

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Sodium chloride	,	DNEL = 295.52mg/kg	,	DNEL = 295.52mg/kg
7647-14-5 ( 0.7464 )		bw/day		bw/day
Potassium chloride		DNEL = 910mg/kg		DNEL = 303mg/kg
7447-40-7 ( 0.0187 )		bw/day		bw/day

Component	Acute effects local	Acute effects	Chronic effects local	Chronic effects
	(Inhalation)	systemic (Inhalation)	(Inhalation)	systemic (Inhalation)
Sodium chloride 7647-14-5 ( 0.7464 )		DNEL = 2068.62mg/m <sup>3</sup>		DNEL = 2068.62mg/m <sup>3</sup>
Dihydrogen potassium phosphate 7778-77-0 ( 0.0233 )				DNEL = 14.82mg/m <sup>3</sup>
Potassium chloride 7447-40-7 ( 0.0187 )		DNEL = 5320mg/m <sup>3</sup>		DNEL = 1064mg/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	
Sodium chloride	PNEC = 5mg/L			PNEC = 500mg/L	PNEC = 4.86 mg/kg
7647-14-5 ( 0.7464 )					soil dw
Sodium phosphate dibasic	PNEC = 0.05mg/L		PNEC = 0.5mg/L	PNEC = 50mg/L	
7558-79-4 ( 0.1064 )					
Potassium chloride	PNEC = 0.1mg/L		PNEC = 1mg/L	PNEC = 10mg/L	
7447-40-7 ( 0.0187 )	_				

Component	Marine water	Marine water	Marine water	Food chain	Air
		sediment	intermittent		
Sodium phosphate dibasic 7558-79-4 ( 0.1064 )	PNEC = 0.005mg/L				
Potassium chloride 7447-40-7 ( 0.0187 )	PNEC = 0.1mg/L				

# 8.2. Exposure controls

# **Engineering Measures**

Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

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Personal protective equipment

**Eye Protection** Goggles (European standard - EN 166)

**Hand Protection** Protective gloves

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

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

Liquid

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

**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** 

Odor No information available

No data available **Odor Threshold Melting Point/Range** No data available **Softening Point** No data available **Boiling Point/Range** No information available Flammability (liquid) No data available

Flammability (solid,gas) Not applicable

**Explosion Limits** No data available

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

**Autoignition Temperature** No data available No data available **Decomposition Temperature** 

На 7.4

No data available **Viscosity** 

**Water Solubility Immiscible** 

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow

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Sucrose -3.67

**Vapor Pressure** 23 hPa @ 20 °C Density / Specific Gravity No data available

**Bulk Density** Not applicable Liquid **Vapor Density** No data available (Air = 1.0)

**Particle characteristics** Not applicable (liquid)

9.2. Other information

# **SECTION 10: STABILITY AND REACTIVITY**

10.1. Reactivity None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

Incompatible products. Excess heat.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

None under normal use conditions.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

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

#### **Product Information**

(a) acute toxicity;

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

# Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	-	-
Paraformaldehyde	LD50 = 800 mg/kg (Rat)	-	LC50 = 1070 mg/m <sup>3</sup> (Rat) 4 h
Sucrose	LD50 = 29700 mg/kg (Rat)	-	-
Sodium chloride	LD50 = 3 g/kg (Rat)	LD50 > 10000 mg/kg ( Rabbit )	LC50 > 42 mg/L (Rat) 1 h
Sodium phosphate dibasic	LD50 = 17 g/kg (Rat)	-	-
Dihydrogen potassium phosphate	LD50 = 3200 mg/kg (Rat)	LD50 > 4640 mg/kg ( Rabbit )	LC50 > 0.83 mg/L (Rat) 4 h

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Potassium chloride	LD50 = 2600 mg/kg (Rat)	-	-

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Respiratory No data available Skin Category 1

May cause sensitization by skin contact

(e) germ cell mutagenicity; No data available

Category 2 (f) carcinogenicity;

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

No data available (h) STOT-single exposure;

(i) STOT-repeated exposure; No data available

**Target Organs** No information available.

(j) aspiration hazard; No data available

delayed

Symptoms / effects, both acute and 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

Assess endocrine disrupting properties for human health. This product does not contain any **Endocrine Disrupting Properties** 

known or suspected endocrine disruptors.

# **SECTION 12: ECOLOGICAL INFORMATION**

12.1. Toxicity **Ecotoxicity effects** 

Component	Freshwater Fish	Water Flea	Freshwater Algae
Paraformaldehyde	>10 mg/L 96h	EC50 = 42 mg/L 24h	
Sodium chloride	Pimephals prome: LC50: 7650 mg/L/96h	EC50: 1000 mg/L/48h	
Potassium chloride	Lepomis macrochirus: LC50: 1060 mg/L /96h Pimephales promelas: LC50: 750 - 1020 mg/L /96h	EC50: 825 mg/L/48h	EC50: 2500 mg/L/72h

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12.2. Persistence and degradability

Persistence Immiscible with water.

**12.3. Bioaccumulative potential** May have some potential to bioaccumulate

Component	log Pow	Bioconcentration factor (BCF)
Sucrose	-3.67	No data available

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

No data available for 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 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 flush to sewer.

# **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

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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**

#### 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
Water	7732-18-5	231-791-2	-	-	X	X	KE-35400	Χ	-
Paraformaldehyde	30525-89-4	-	-	-	Х	Х	KE-27818	Х	Х
Sucrose	57-50-1	200-334-9	-	-	Х	X	KE-17258	-	X
Sodium chloride	7647-14-5	231-598-3	-	-	Х	X	KE-31387	Х	X
Sodium phosphate dibasic	7558-79-4	231-448-7	-	-	X	X	KE-12344	Х	X
Dihydrogen potassium phosphate	7778-77-0	231-913-4	-	-	Х	Х	KE-28622	Х	X
Potassium chloride	7447-40-7	231-211-8	-	-	X	X	KE-29086	Х	X

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Water	7732-18-5	X	ACTIVE	Х	-	X	X	Х
Paraformaldehyde	30525-89-4	Х	ACTIVE	Х	-	Х	Х	Х
Sucrose	57-50-1	Х	ACTIVE	Х	-	Х	Х	Х
Sodium chloride	7647-14-5	Х	ACTIVE	Х	-	Х	Х	Х
Sodium phosphate dibasic	7558-79-4	Х	ACTIVE	Х	-	X	Х	Х
Dihydrogen potassium phosphate	7778-77-0	Х	ACTIVE	Х	-	Х	Х	Х
Potassium chloride	7447-40-7	Х	ACTIVE	Х	-	Х	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

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)
Water	7732-18-5	-	-	-
Paraformaldehyde	30525-89-4	-	Use restricted. See item 75. (see link for restriction details)	-
Sucrose	57-50-1	-	-	-
Sodium chloride	7647-14-5	-	-	-
Sodium phosphate dibasic	7558-79-4	-	-	-

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Dihydrogen potassium phosphate	7778-77-0	-	-	-
Potassium chloride	7447-40-7	-	-	-

#### **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
Water	7732-18-5	Not applicable	Not applicable
Paraformaldehyde	30525-89-4	Not applicable	Not applicable
Sucrose	57-50-1	Not applicable	Not applicable
Sodium chloride	7647-14-5	Not applicable	Not applicable
Sodium phosphate dibasic	7558-79-4	Not applicable	Not applicable
Dihydrogen potassium phosphate	7778-77-0	Not applicable	Not applicable
Potassium chloride	7447-40-7	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
Paraformaldehyde	WGK2	
Sucrose	WGK1	
Sodium chloride	WGK1	
Sodium phosphate dibasic	WGK1	
Dihydrogen potassium phosphate	WGK1	
Potassium chloride	WGK1	

Sodium chloride Tableaux des mala		France - INRS (Tables of occupational diseases)
		Tableaux des maladies professionnelles (TMP) - RG 78
		Tableaux des maladies professionnelles (TMP) - RG 67

	Component	Switzerland - Ordinance on the	Switzerland - Ordinance on	Switzerland - Ordinance of the
١	•	Reduction of Risk from	Incentive Taxes on Volatile	Rotterdam Convention on the
		handling of hazardous	Organic Compounds (OVOC)	Prior Informed Consent
١	substances preparation (SR			Procedure
١		814.81)		

ALFAAJ61984

#### Paraformaldehyde fixative solution

Sodium chloride Prohibited and Restricted 7647-14-5 ( 0.7464 ) Substances

# 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

H228 - Flammable solid

H302 - Harmful if swallowed

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H351 - Suspected of causing cancer

#### Legend

**CAS** - Chemical Abstracts Service

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

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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

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

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime

Dangerous Goods Code

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from

Ships

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

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

#### Key literature references and sources for data

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

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

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

On basis of test data Physical hazards **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 eve wash and safety showers.

**Prepared By** Health, Safety and Environmental Department

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**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**