

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

Creation Date 20-Jan-2011 Revision Date 09-Feb-2024 Revision Number 8

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

1.1. Product identifier

Product Description: Chromic acid mix

Cat No. : J/3500/PC17, J/3500/PC15

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

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

Tel: 01509 231166

Chemtrec US: (800) 424-9300 Chemtrec EU: 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

Skin Corrosion/Irritation Category 1 A (H314)
Serious Eye Damage/Eye Irritation Category 1 (H318)

Category 1 (1010)

FSUJ3500

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Carcinogenicity Category 1B (H350i)

Environmental hazards

Chronic aquatic toxicity Category 3 (H412)

Full text of Hazard Statements: see section 16

2.2. Label elements

Contains Sulphuric Acid, Chromic acid;



Signal Word

Danger

Hazard Statements

H314 - Causes severe skin burns and eye damage

H350i - May cause cancer by inhalation

H412 - Harmful to aquatic life with long lasting effects

EUH208 - Contains Chromium. May produce an allergic reaction

Precautionary Statements

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

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

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

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

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
Sulfuric acid	7664-93-9	231-639-5	90 - 95	Skin Corr. 1A (H314) Eye Dam. 1 (H318)
Chromic acid	7738-94-5	EEC No. 231-801-5	<1	Skin Sens. 1 (H317) Carc. 1B (H350i) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Water	7732-18-5	231-791-2	5 - 10	-
Potassium hydrogen sulfate	7646-93-7	EEC No. 231-594-1	<1	Skin Corr. 1B (H314) Eye Dam. 1 (H318) STOT SE 3 (H335)

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Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Sulfuric acid	Skin Corr. 1A :: C>=15% Eye Irrit. 2 :: 5%<=C<15% Skin Irrit. 2 :: 5%<=C<15%	-	-
Chromic acid	-	1	-

Components	Reach Registration Number	
Sulfuric acid	01-2119458838-20	
Potassium hydrogen sulfate	01-2120764174-54	

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye ContactRinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

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 breathing is difficult, give oxygen. 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 burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure and increased heart rate

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

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Extinguishing media which must not be used for safety reasons

Water.

5.2. Special hazards arising from the substance or mixture

Keep product and empty container away from heat and sources of ignition. Reacts violently with water. Contact with metals may evolve flammable hydrogen gas.

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Hazardous Combustion Products

May emit toxic fumes under fire conditions, Sulfur oxides, Chromium oxide.

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

Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Do not get water inside containers

6.2. Environmental precautions

Should not be released into the environment. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. See Section 12 for additional Ecological Information. Avoid release to the environment. Collect spillage.

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

Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowed then seek immediate medical assistance. Do not get water inside containers. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and immediately after handling the product.

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 containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

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

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8.1. Control parameters

Exposure limits

List source(s): **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. **IRE** - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

Component	The United Kingdom	European Union	Ireland
Sulfuric acid	STEL: 0.15 mg/m ³ 15 min	TWA: 0.05 mg/m ³ (8h)	TWA: 0.05 ppm 8 hr.
	TWA: 0.05 mg/m ³ 8 hr		STEL: 0.15 ppm 15 min
Chromic acid	STEL: 0.03 mg/m ³ 15 min		
	STEL: 0.065 mg/m ³ 15 min		
	TWA: 0.01 mg/m ³ 8 hr		
	TWA: 0.025 mg/m ³ 8 hr		
	Carc. as Cr		
	Resp. Sens.		

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 (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Sulfuric acid 7664-93-9 (90 - 95)	DNEL = 0.1mg/m ³		DNEL = 0.05mg/m ³	

Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water		Water Intermittent Microorganisms in Soil (Agriculture)
		sediment	sewage treatment
Sulfuric acid	PNEC =	PNEC =	PNEC = 8.8mg/L
7664-93-9 (90 - 95)	0.0025mg/L	0.002mg/kg	
		sediment dw	

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Sulfuric acid	PNEC =	PNEC =			
7664-93-9 (90 - 95)	0.00025mg/L	0.002mg/kg			
·	-	sediment dw			

8.2. Exposure controls

Engineering Measures

Use only under a chemical fume hood. 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

Personal protective equipment

Eye Protection Goggles (European standard - EN 166)

Hand Protection Protective gloves

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Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Butyl rubber	See manufacturers	-	EN 374	(minimum requirement)
	recommendations			

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

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: Acid gases filter Type E Yellow 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State Liquid

Appearance Oily Clear, colorless to yellow

Odor Odorless

Odor ThresholdNo data availableMelting Point/Range10 °C / 50 °FSoftening PointNo data available

Boiling Point/Range 290 - 338 °C / 554 - 640.4 °F

Flammability (liquid)

No data available

Flammability (solid,gas) Not applicable Liquid

Explosion Limits No data available

Flash Point No data available Method - No information available

Autoignition TemperatureNo data availableDecomposition TemperatureNo data available

pH 0.3 (1N)

Viscosity 21 mPas @ 25°C Water Solubility Soluble in water

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Vapor Pressure No data available

Density / Specific Gravity 1.84

Bulk DensityNot applicableLiquidVapor DensityNo data available(Air = 1.0)

Particle characteristics (liquid) Not applicable

9.2. Other information

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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

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions Reacts violently with water.

10.4. Conditions to avoid

Incompatible products. Excess heat. Protect from water.

10.5. Incompatible materials

Combustible material. Metals. Organic materials. Bases. Amines. Water. Reducing Agent.

10.6. Hazardous decomposition products

May emit toxic fumes under fire conditions. Sulfur oxides. Chromium oxide.

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 ATE data, the classification criteria are not met

Dermal No data available

Inhalation Based on ATE data, the classification criteria are not met

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sulfuric acid	2140 mg/kg (Rat)	-	LC50 = 0.375 mg/L (Rat) 4 h
Water	-	-	-
Potassium hydrogen sulfate	LD50 = 2340 mg/kg (Rat)	-	-

(b) skin corrosion/irritation; Category 1 A

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; Category 1B

The table below indicates whether each agency has listed any ingredient as a carcinogen

- 1	Component	FII	IIK	Germany	IAPC
	Component	l EU	I UK	Germany	IARC

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Sulfuric acid Group 1

(a) reproductive toxicity: No data available

(h) STOT-single exposure; No data available

No data available (i) STOT-repeated exposure;

No information available. **Target Organs**

(j) aspiration hazard; No data available

delayed

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest. shortness of breath, bluish skin, decreased blood pressure and increased heart rate.

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 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not allow material to contaminate ground water system. The product

contains following substances which are hazardous for the environment.

Component	Freshwater Fish	Water Flea	Freshwater Algae
Sulfuric acid	LC50: > 500 mg/L, 96h static (Brachydanio rerio)	EC50: 29 mg/L/24h	<u>-</u>

Component	Microtox	M-Factor
Sulfuric acid	-	
Chromic acid		1

12.2. Persistence and degradability Not applicable for mixtures

Persistence May persist, based on information available.

Contains substances known to be hazardous to the environment or not degradable in waste Degradation in sewage treatment plant

water treatment plants.

12.3. Bioaccumulative potential May have some potential to bioaccumulate

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

12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Endocrine disrupting

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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. Large amounts will affect pH and harm aquatic organisms. Solutions with low pH-value must be neutralized before discharge. Do not let

this chemical enter the environment.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

14.1. UN number UN2240

14.2. UN proper shipping name CHROMOSULPHURIC ACID

14.3. Transport hazard class(es) 8
14.4. Packing group I

<u>ADR</u>

14.1. UN number UN2240

14.2. UN proper shipping name CHROMOSULPHURIC ACID

14.3. Transport hazard class(es) 8 14.4. Packing group 8

IATA

14.1. UN number UN2240

14.2. UN proper shipping name CHROMOSULPHURIC ACID

14.3. Transport hazard class(es) 8
14.4. Packing group I

14.5. Environmental hazards No hazards identified

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
Sulfuric acid	7664-93-9	231-639-5	-	-	Х	X	KE-32570	X	Х
Chromic acid	7738-94-5	231-801-5	-	-	Х	Х	KE-05963	Х	Х
Water	7732-18-5	231-791-2	-	-	Х	Х	KE-35400	Х	-
Potassium hydrogen sulfate	7646-93-7	231-594-1	-	-	Х	Х	KE-32642	Х	Х

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Sulfuric acid	7664-93-9	Х	ACTIVE	Х	-	Χ	Х	Х
Chromic acid	7738-94-5	Х	ACTIVE	Х	-	Х	Х	Х
Water	7732-18-5	Х	ACTIVE	Х	-	Х	Х	Х
Potassium hydrogen sulfate	7646-93-7	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	on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Sulfuric acid	7664-93-9	-	Use restricted. See item 75. (see link for restriction details)	-
Chromic acid	7738-94-5	Carcinogenic Category 1B,Article 57 Application date: March 21, 2016 Sunset date: September 21, 2017 Exemption - None	Use restricted. See item 75. (see link for restriction details) Use restricted. See item 28. (see link for restriction details) Use restricted. See item 47. (see link for restriction details)	SVHC Candidate list - 231-801-5 - Carcinogenic, Article 57a
Water	7732-18-5	=	-	-
Potassium hydrogen sulfate	7646-93-7	-	Use restricted. See item 75. (see link for restriction details)	-

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

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
Sulfuric acid	7664-93-9	Not applicable	Not applicable
Chromic acid	7738-94-5	Not applicable	Not applicable

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Water	7732-18-5	Not applicable	Not applicable
Potassium hydrogen sulfate	7646-93-7	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 .

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

Take note of Dir 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations

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
Sulfuric acid	WGK1	
Chromic acid	WGK3	
Potassium hydrogen sulfate	WGK1	

Component	France - INRS (Tables of occupational diseases)			
Chromic acid	Tableaux des maladies professionnelles (TMP) - RG 10,RG 10bis,RG 10ter			

	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	
Sulfuric acid 7664-93-9 (90 - 95)		Prohibited and Restricted Substances			
Chromic acid 7738-94-5 (< 1)		Prohibited and Restricted 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

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H350i - May cause cancer by inhalation

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Legend

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CAS - Chemical Abstracts Service

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

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

IARC - International Agency for Research on Cancer

NZIoC - New Zealand Inventory of Chemicals

Predicted No Effect Concentration (PNEC)

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

EC50 - Effective Concentration 50%

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

TWA - Time Weighted Average

LD50 - Lethal Dose 50%

Substances List

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

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)

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

Physical hazards

Health Hazards

Environmental hazards

On basis of test data
Calculation method
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.

Chemical incident response training.

Creation Date20-Jan-2011Revision Date09-Feb-2024Revision SummaryNot applicable.

This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet