

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

Revision Date 22-Jul-2025 Creation Date 19-Apr-2010 **Revision Number** 15

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

1.1. Product identifier

Product Description: Glutaraldehyde 50% solution

G/0518/PB08 Cat No.:

Synonyms Glutaraldehyde; Pentanedial

Unique Formula Identifier (UFI) D9U9-HU0T-RW0A-VV3G

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

Recommended Use Laboratory chemicals.

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

PC21 - Laboratory chemicals **Product category**

Process categories PROC15 - Use as a laboratory reagent

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

No Information available Uses advised against

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

begel.sdsdesk@thermofisher.com E-mail address

1.4. Emergency telephone number

Tel: 01509 231166

Chemtrec US: (800) 424-9300 Chemtrec EU: 001-703-527-3887

Poison Centre - Emergency

Ireland: National Poisons Information Centre (NPIC) information services

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

GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

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Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Acute oral toxicity

Acute Inhalation Toxicity - Vapors

Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

Respiratory Sensitization

Skin Sensitization

Specific target organ toxicity - (single exposure)

Category 3 (H301)

Category 1 (H314)

Category 1 (H318)

Category 1 (H334)

Category 1 (H317)

Category 3 (H335)

Environmental hazards

Acute aquatic toxicity
Chronic aquatic toxicity
Category 1 (H400)
Category 2 (H411)

Full text of Hazard Statements: see section 16





Signal Word

Danger

Hazard Statements

H301 - Toxic if swallowed

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H330 - Fatal if inhaled

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H400 - Very toxic to aquatic life

H411 - Toxic to aquatic life with long lasting effects

EUH071 - Corrosive to the respiratory tract

Precautionary Statements

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

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

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

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

P310 - Immediately call a POISON CENTER or doctor/physician

2.3. Other hazards

Glutaraldehyde 50% solution

Corrosive to the respiratory tract Toxicity to Soil Dwelling Organisms Toxic to terrestrial vertebrates

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 %	GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Glutaraldehyde	111-30-8	203-856-5	50	Acute Tox. 2 (H330) Acute Tox. 3 (H301) Skin Corr. 1B (H314) Eye Dam. 1 (H318) STOT SE 3 (H335) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411) EUH071
Water	7732-18-5	231-791-2	50	-

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Glutaraldehyde	STOT SE 3 (H335) :: 0.5%<=C<5%	1 (acute) 1 (chronic)	-

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Show this safety data sheet to the doctor in attendance. Immediate medical attention is **General Advice**

required.

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In **Eye Contact**

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 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. Remove to fresh

air. 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. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Ingestion causes severe swelling,

severe damage to the delicate tissue and danger of perforation: 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: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated

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

CO₂, dry chemical, dry sand, 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. The product causes burns of eyes, skin and mucous membranes. Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO2).

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.

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

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

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Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

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 at temperatures below 25°C. Keep container tightly closed in a dry and well-ventilated place. Corrosives area. To maintain product quality: Keep refrigerated.

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

Class 6.1A

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

Component	The United Kingdom	European Union	Ireland
Glutaraldehyde	STEL: 0.05 ppm 15 min		STEL: 0.05 ppm 15 min
·	STEL: 0.2 mg/m ³ 15 min		STEL: 0.2 mg/m ³ 15 min
	TWA: 0.05 ppm 8 hr		
	TWA: 0.2 mg/m ³ 8 hr		
	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 (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Glutaraldehyde				DNEL = 6.25mg/kg
111-30-8 (50)				bw/day

Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water	Water Intermittent Microorganisms in Soil (Agriculture)
		sediment	sewage treatment

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ſ	Glutaraldehyde	PNEC =	PNEC =	PNEC = 0.006mg/L	PNEC = 0.8mg/L	PNEC = 0.21mg/kg
	111-30-8 (50)	0.0025mg/L	0.091mg/kg			soil dw
L			sediment dw			

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Glutaraldehyde	PNEC =	PNEC =			
111-30-8 (50)	0.00025mg/L	0.009mg/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

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

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: 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:- 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

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Method - CC (closed cup)

Physical State Liquid

Appearance No information available

Odor pungent

Odor Threshold

Melting Point/Range

Softening Point

Rolling Point/Range

No data available

No data available

No data available

Boiling Point/Range 101.5 °C / 214.7 °F @ 740 mmHg

Flammability (liquid) No data available

Flammability (solid,gas) Not applicable Liquid Explosion Limits Lower 1.5 vol%

n Limits Lower 1.5 vol% Upper 50 vol%

Flash Point No information available

Autoignition Temperature 395 °C / 743 °F

Decomposition Temperature 110°C pH 3.2-4.2

Viscosity 20 mPa.s (50°C)

Water Solubility Soluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow Glutaraldehyde -0.36

Vapor Pressure 15 mmHg @ 20 °C

Density / Specific Gravity 1.130

Bulk DensityNot applicableLiquidVapor Density1.05(Air = 1.0)

Particle characteristics Not applicable (liquid)

9.2. Other information

Evaporation Rate 0.93 (Butyl Acetate = 1.0)

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 None under normal processing.

10.4. Conditions to avoid

Incompatible products. Excess heat. Temperatures above 50°C.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases. Alcohols. Amines.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO2).

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 3

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

Inhalation Category 2

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glutaraldehyde	77 mg/kg (Rat)	>2500 mg/kg (Rat)	0.28 - 0.39 mg/L (Rat) 4 h
Water	=	-	-

Category 1 B (b) skin corrosion/irritation; **OECD 404 Test method Test species** rabbit **Observational endpoint** Corrosive

(c) serious eye damage/irritation; Category 1 Test method Draize test

Test species rabbit

Observation end point CAUSES (SEVERE) EYE BURNS, irreversible

(d) respiratory or skin sensitization;

Category 1 Respiratory Skin Category 1

Component	Test method	Test species	Study result
Glutaraldehyde	Local Lymph Node Assay	mouse	Sensitization
111-30-8 (50)			

May cause sensitization by skin contact

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

Component	Test method	Test species	Study result
Glutaraldehyde 111-30-8 (50)	in vitro OECD Test Guideline 473 Mammalian	in vitro Mammalian	Positive
	in vivo OECD Test Guideline 474	in vivo mouse Animal germ cell	negative

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

Component	Test method	Test species / Duration	Study result
Glutaraldehyde	OECD Test Guideline 451	Rat / 2 years	negative
111-30-8 (50)		•	NOAEL = 100 ppm

There are no known carcinogenic chemicals in this product

Based on available data, the classification criteria are not met (a) reproductive toxicity:

	(3)			
Component		Test method	Test species / Duration	Study result
	Glutaraldehyde	OECD Test Guideline 414	Rat	negative
	111-30-8 (50)			-

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(h) STOT-single exposure: Category 3

No data available (i) STOT-repeated exposure;

Target Organs No information available.

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

delayed

Symptoms / effects, both acute and Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. 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. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated.

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
Glutaraldehyde	LC50: 7.8 - 22 mg/L, 96h static	EC50: 0.56 - 1.0 mg/L, 48h	EC50: = 0.84 mg/L, 96h
	(Lepomis macrochirus)	Static (Daphnia magna)	(Desmodesmus subspicatus)
	LC50: 2.6 - 4.8 mg/L, 96h	EC50: = 14 mg/L, 48h (Daphnia	EC50: = 0.61 mg/L, 72h
	flow-through (Oncorhynchus	magna)	(Desmodesmus subspicatus)
	mykiss)		
	LC50: 7.8 - 13 mg/L, 96h static		
	(Oncorhynchus mykiss)		
	LC50: = 5.4 mg/L, 96h static		
	(Pimephales promelas)		

Component	Microtox	M-Factor
Glutaraldehyde	EC50 = 13.3 mg/L 17 h	1 (acute)
	EC50 = 76.0 mg/L 5 min	1 (chronic)

12.2. Persistence and degradability Readily biodegradable

Persistence Miscible with water, Persistence is unlikely, based on information available, Soluble in

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 Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Glutaraldehyde	-0.36	No data available

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

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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

Should not be released into the environment. Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging

Dispose of this container to hazardous or special waste collection point.

European Waste Catalogue (EWC)

According to the European Waste Catalog, Waste Codes are not product specific, but

application specific.

Other Information

Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Large amounts will affect pH and harm aquatic organisms. Do not let this chemical enter the environment.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

14.1. UN number UN2922

14.2. UN proper shipping name Technical Shipping NameCorrosive liquid, toxic, n.o.s.
Glutaraldehyde solution

14.3. Transport hazard class(es) 8
Subsidiary Hazard Class 6.1
14.4. Packing group II

<u>ADR</u>

14.1. UN number UN2922

14.2. UN proper shipping name Technical Shipping NameCorrosive liquid, toxic, n.o.s.
Glutaraldehyde solution

14.3. Transport hazard class(es)8Subsidiary Hazard Class6.114.4. Packing groupII

IATA

14.1. UN number UN2922

14.2. UN proper shipping name
Technical Shipping Name
Corrosive liquid, toxic, n.o.s.
Glutaraldehyde solution

14.3. Transport hazard class(es)

8

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Subsidiary Hazard Class 6.1 14.4. Packing group II

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 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

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). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Glutaraldehyde	111-30-8	203-856-5	-	-	X	X	KE-27969	X	Х
Water	7732-18-5	231-791-2	-	-	X	X	KE-35400	X	-

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Glutaraldehyde	111-30-8	X	ACTIVE	X	Ī	X	X	X
Water	7732-18-5	Х	ACTIVE	X	-	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 Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
	Glutaraldehyde	111-30-8	-	Use restricted. See entry 75. (see link for restriction details)	SVHC Candidate list - 203-856-5 - Respiratory sensitising properties (Article 57f - human health)
Г	Water	7732-18-5	-	-	-

REACH links

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

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

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.

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
Glutaraldehyde	111-30-8	Not applicable	Not applicable
Water	7732-18-5	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 = 3 (self classification)

	Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Ī	Glutaraldehyde	WGK3	Class I: 20 mg/m³ (Massenkonzentration)

Component	France - INRS (Tables of occupational diseases)
Glutaraldehyde	Tableaux des maladies professionnelles (TMP) - RG 65,RG 66

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

H330 - Fatal if inhaled

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 - May cause respiratory irritation

H400 - Very toxic to aquatic life

H411 - Toxic to aquatic life with long lasting effects

EUH071 - Corrosive to the respiratory tract

Legend

CAS - Chemical Abstracts Service

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

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

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

NZIoC - New Zealand Inventory of Chemicals

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

Glutaraldehyde 50% solution

NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

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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

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

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

 $\mbox{\bf MARPOL}$ - International Convention for the Prevention of Pollution from Ships

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

Key literature references and sources for data https://echa.europa.eu/information-on-chemicals

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

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 incident response training.

Creation Date19-Apr-2010Revision Date22-Jul-2025Revision 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