

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

1.1. Product identifier

Product Description: Formal saline phosphate buffered pH 7.3
Cat No. : F/1515/25

Unique Formula Identifier (UFI) KC8F-32H4-CX08-V22J

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 Pharmaceuticaaan 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

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

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Health hazards

Skin Corrosion/Irritation	Category 2 (H315)
Serious Eye Damage/Eye Irritation	Category 2 (H319)
Skin Sensitization	Category 1 (H317)
Germ Cell Mutagenicity	Category 2 (H341)
Carcinogenicity	Category 1B (H350)
Specific target organ toxicity - (single exposure)	Category 2 (H371)

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

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H341 - Suspected of causing genetic defects
H350 - May cause cancer
H371 - May cause damage to organs

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
P309 + P311 - IF exposed or if you feel unwell: 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
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				GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Formaldehyde	50-00-0	200-001-8	2.5-5	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1 (H317) STOT SE 3 (H335) Muta. 2 (H341) Carc. 1B (H350)
Methyl alcohol	67-56-1	200-659-6	< 1.5	Flam. Liq. 2 (H225) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) STOT SE 1 (H370)
Orthophosphoric acid	7664-38-2	EEC No. 231-633-2	1-2	Met. Corr. 1 (H290) Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318)
Sodium phosphate, monobasic	7558-80-7	EEC No. 231-449-2	1-2	-
Sodium chloride	7647-14-5	231-598-3	0.1-1	-
Water	7732-18-5	231-791-2	90-95	-

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Formaldehyde	Skin Corr. 1B :: C>=25% Eye Irrit. 2 :: 5%<=C<25% Skin Irrit. 2 :: 5%<=C<25% Skin Sens. 1 :: C>=0.2% STOT SE 3 :: C>=5%	-	-
Methyl alcohol	STOT Single Exp. 1 :: >= 10 STOT Single Exp. 2 :: 3 - < 10	-	-
Orthophosphoric acid	Skin Corr. 1B :: C>=25% Eye Irrit. 2 :: 10%<=C<25% Skin Irrit. 2 :: 10%<=C<25%	-	-

Components	Reach Registration Number
Formaldehyde	01-2119488953-20
Orthophosphoric acid	01-2119485924-24
Methanol	01-2119433307-44
Sodium phosphate, monobasic	01-2119489796-13-0045

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation persists.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if irritation persists.
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

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pocket mask equipped with a one-way valve or other proper respiratory medical device. If symptoms persist, call a physician.

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

May cause allergic skin reaction. Irritating to eyes. Irritating to skin. 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.

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system. 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.

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SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

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

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool 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): **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
Formaldehyde	STEL: 2 ppm 15 min STEL: 2.5 mg/m ³ 15 min TWA: 2 ppm 8 hr TWA: 2.5 mg/m ³ 8 hr Carc.	TWA: 0.37 mg/m ³ (8h) TWA: 0.3 ppm (8h) Skin STEL: 0.74 mg/m ³ (8h) STEL: 0.6 ppm (8h)	TWA: 0.3 ppm 8 hr. TWA: 0.5 ppm 8 hr. for the healthcare, funeral and embalming sectors until July 11, 2024 TWA: 0.37 mg/m ³ 8 hr. TWA: 0.62 mg/m ³ 8 hr. for the healthcare, funeral and embalming sectors until July 11, 2024 STEL: 0.6 ppm 15 min STEL: 0.738 mg/m ³ 15 min STEL: 0.62 mg/m ³ 15 min
Methyl alcohol	WEL - TWA: 200 ppm TWA; 266 mg/m ³ TWA WEL - STEL: 250 ppm STEL; 333 mg/m ³ STEL	TWA: 200 ppm 8 hr TWA: 260 mg/m ³ 8 hr Skin	TWA: 200 ppm 8 hr. TWA: 260 mg/m ³ 8 hr. STEL: 600 ppm 15 min STEL: 780 mg/m ³ 15 min Skin
Orthophosphoric acid	STEL: 2 mg/m ³ TWA: 1 mg/m ³	TWA: 1 mg/m ³ (8h) STEL: 2 mg/m ³ (15min)	TWA: 1 mg/m ³ 8 hr. STEL: 2 mg/m ³ 15 min

Biological limit values

List source(s):

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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)
Formaldehyde 50-00-0 (2.5-5)			DNEL = 37µg/cm ²	DNEL = 240mg/kg bw/day
Methyl alcohol 67-56-1 (< 1.5)		DNEL = 20mg/kg bw/day		DNEL = 20mg/kg bw/day
Orthophosphoric acid 7664-38-2 (1-2)		DNEL = 134.5mg/kg bw/day		DNEL = 3.8mg/kg bw/day
Sodium chloride 7647-14-5 (0.1-1)		DNEL = 295.52mg/kg bw/day		DNEL = 295.52mg/kg bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Formaldehyde 50-00-0 (2.5-5)	DNEL = 0.75mg/m ³		DNEL = 0.375mg/m ³	DNEL = 9mg/m ³
Methyl alcohol 67-56-1 (< 1.5)	DNEL = 130mg/m ³	DNEL = 130mg/m ³	DNEL = 130mg/m ³	DNEL = 130mg/m ³
Orthophosphoric acid 7664-38-2 (1-2)	DNEL = 1mg/m ³	DNEL = 948.6mg/m ³	DNEL = 1mg/m ³	DNEL = 13.2mg/m ³
Sodium chloride 7647-14-5 (0.1-1)		DNEL = 2068.62mg/m ³		DNEL = 2068.62mg/m ³

Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water sediment	Water Intermittent	Microorganisms in sewage treatment	Soil (Agriculture)
Formaldehyde 50-00-0 (2.5-5)	PNEC = 0.44mg/L	PNEC = 2.3mg/kg sediment dw	PNEC = 4.44mg/L	PNEC = 0.19mg/L	PNEC = 0.2mg/kg soil dw
Methyl alcohol 67-56-1 (< 1.5)	PNEC = 20.8mg/L	PNEC = 77mg/kg sediment dw	PNEC = 1540mg/L	PNEC = 100mg/L	PNEC = 100mg/kg soil dw
Orthophosphoric acid 7664-38-2 (1-2)	PNEC = 100µg/L	PNEC = 392µg/kg sediment dw	PNEC = 1000µg/L	PNEC = 100mg/L	PNEC = 19.7µg/kg soil dw
Sodium phosphate, monobasic 7558-80-7 (1-2)	PNEC = 0.05mg/L		PNEC = 0.5mg/L	PNEC = 50mg/L	
Sodium chloride 7647-14-5 (0.1-1)	PNEC = 5mg/L			PNEC = 500mg/L	PNEC = 4.86mg/kg soil dw

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Formaldehyde 50-00-0 (2.5-5)	PNEC = 0.44mg/L	PNEC = 2.3mg/kg sediment dw			
Methyl alcohol 67-56-1 (< 1.5)	PNEC = 2.08mg/L	PNEC = 7.7mg/kg sediment dw			
Orthophosphoric acid 7664-38-2 (1-2)	PNEC = 10µg/L	PNEC = 39.2µg/kg sediment dw		PNEC = 4mg/kg food	
Sodium phosphate, monobasic 7558-80-7 (1-2)	PNEC = 0.005mg/L				

8.2. Exposure controls

Engineering Measures

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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
Natural rubber	See manufacturers recommendations	-	EN 374	(minimum requirement)
Nitrile rubber				
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 compatibility, 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:- Particle filtering: EN149:2001
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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State	Liquid	
Appearance	Clear	
Odor	pungent	
Odor Threshold	No data available	
Melting Point/Range	-5 °C / 23 °F	Estimated
Softening Point	No data available	
Boiling Point/Range	100 °C / 212 °F	Estimated
Flammability (liquid)	No data available	
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	No data available	
Flash Point	Not applicable	Method - No information available
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	

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pH	7.3	
Viscosity	No data available	
Water Solubility	Miscible	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/water)		
Component	log Pow	
Formaldehyde	-0.35	
Methyl alcohol	-0.74	
Vapor Pressure	No data available	
Density / Specific Gravity	~1	Estimated
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

Hazardous Polymerization Hazardous polymerization does not occur.
Hazardous Reactions None under normal processing.

10.4. Conditions to avoid Incompatible products. Excess heat.

10.5. Incompatible materials Strong oxidizing agents.

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
Formaldehyde	500 mg/kg (Rat)	LD50 = 270 mg/kg (Rabbit)	0.578 mg/L (Rat) 4 h
Methyl alcohol	LD50 = 1187 – 2769 mg/kg (Rat)	LD50 = 17100 mg/kg (Rabbit)	LC50 = 128.2 mg/L (Rat) 4 h
Orthophosphoric acid	LD50 = 1530 mg/kg (Rat)	LD50 = 2740 mg/kg (Rabbit)	850 mg/m ³ (Rat) 1 h

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Sodium phosphate, monobasic	LD50 = 8290 mg/kg (Rat)	LD50 > 7940 mg/kg (Rabbit)	LC50 > 0.83 mg/L (Rat) 4 h
Sodium chloride	LD50 = 3 g/kg (Rat)	LD50 > 10000 mg/kg (Rabbit)	LC50 > 42 mg/L (Rat) 1 h
Water	-	-	-

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

Respiratory No data available
Skin Category 1

Component	Test method	Test species	Study result
Formaldehyde 50-00-0 (2.5-5)	Skin sensitization Test method Patch Test	Man guinea pig	Sensitizer Sensitization
	Respiratory sensitization in vitro		
Methyl alcohol 67-56-1 (< 1.5)	OECD Test Guideline 406 Guinea Pig Maximisation Test (GPMT)	guinea pig	non-sensitising

May cause sensitization by skin contact

(e) germ cell mutagenicity; Category 2

(f) carcinogenicity; Category 1B

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

Component	EU	UK	Germany	IARC
Formaldehyde	Carc Cat. 1B	Cat 3		Group 1

(g) reproductive toxicity; Based on available data, the classification criteria are not met

Component	Test method	Test species / Duration	Study result
Methyl alcohol 67-56-1 (< 1.5)	OECD Test Guideline 416	Rat / Inhalation 2 Generation	NOAEC = 1.3 mg/l (air)

(h) STOT-single exposure; Category 2

Results / Target organs Optic nerve, Central nervous system (CNS).

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; No data available

Symptoms / effects, both acute and delayed 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

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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

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

Component	Freshwater Fish	Water Flea	Freshwater Algae
Formaldehyde	Leuciscus idus: LC50 = 15 mg/L 96h	EC50 = 20 mg/L 96h EC50 = 2 mg/L 48h	EC50 (72h) = 4.89 mg/L (Desmodesmus subspicatus)
Methyl alcohol	Pimephales promelas: LC50 > 10000 mg/L 96h	EC50 > 10000 mg/L 24h	
Orthophosphoric acid	98 - 106 mg/L LC50 96 h	> 100 mg/L EC50 = 48 h	
Sodium chloride	Pimephals prome: LC50: 7650 mg/L/96h	EC50: 1000 mg/L/48h	

Component	Microtox	M-Factor
Methyl alcohol	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	

12.2. Persistence and degradability

Persistence

Miscible with water, Persistence is unlikely, based on information available.

Component	Degradability
Formaldehyde 50-00-0 (2.5-5)	Readily biodegradable (OECD guideline 301A, 301C and 301D) under aerobic and anaerobic conditions.
Methyl alcohol 67-56-1 (< 1.5)	DT50 ~ 17.2d >94% after 20d

Degradation in sewage treatment plant

Contains no 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)
Formaldehyde	-0.35	No data available
Methyl alcohol	-0.74	<10 dimensionless

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 properties

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

Persistent Organic Pollutant

This product does not contain any known or suspected substance

Ozone Depletion Potential

This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

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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	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.

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

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/NDL), 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
Formaldehyde	50-00-0	200-001-8	-	-	X	X	KE-17074	X	X

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Methyl alcohol	67-56-1	200-659-6	-	-	X	X	KE-23193	X	X
Orthophosphoric acid	7664-38-2	231-633-2	-	-	X	X	KE-27427	X	X
Sodium phosphate, monobasic	7558-80-7	231-449-2	-	-	X	X	KE-31577	X	X
Sodium chloride	7647-14-5	231-598-3	-	-	X	X	KE-31387	X	X
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
Formaldehyde	50-00-0	X	ACTIVE	X	-	X	X	X
Methyl alcohol	67-56-1	X	ACTIVE	X	-	X	X	X
Orthophosphoric acid	7664-38-2	X	ACTIVE	X	-	X	X	X
Sodium phosphate, monobasic	7558-80-7	X	ACTIVE	X	-	X	X	X
Sodium chloride	7647-14-5	X	ACTIVE	X	-	X	X	X
Water	7732-18-5	X	ACTIVE	X	-	X	X	X

Legend: X - Listed '-' - Not Listed

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - 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)
Formaldehyde	50-00-0	-	Use restricted. See item 72. (see link for restriction details) Use restricted. See item 28. (see link for restriction details) Use restricted. See item 75. (see link for restriction details)	-
Methyl alcohol	67-56-1	-	Use restricted. See item 69. (see link for restriction details) Use restricted. See item 75. (see link for restriction details)	-
Orthophosphoric acid	7664-38-2	-	Use restricted. See item 75. (see link for restriction details)	-
Sodium phosphate, monobasic	7558-80-7	-	-	-
Sodium chloride	7647-14-5	-	-	-
Water	7732-18-5	-	-	-

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
Formaldehyde	50-00-0	5 tonne	50 tonne
Methyl alcohol	67-56-1	500 tonne	5000 tonne
Orthophosphoric acid	7664-38-2	Not applicable	Not applicable
Sodium phosphate,	7558-80-7	Not applicable	Not applicable

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monobasic			
Sodium chloride	7647-14-5	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 .

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 = 3 (self classification)

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Formaldehyde	WGK 3	Krebserzeugende Stoffe - : 5 mg/m ³ (Massenkonzentration)
Methyl alcohol	WGK 2	Class I : 20 mg/m ³ (Massenkonzentration)
Orthophosphoric acid	WGK1	
Sodium phosphate, monobasic	WGK1	
Sodium chloride	WGK1	

Component	France - INRS (Tables of occupational diseases)
Formaldehyde	Tableaux des maladies professionnelles (TMP) - RG 43
Methyl alcohol	Tableaux des maladies professionnelles (TMP) - RG 84
Sodium chloride	Tableaux des maladies professionnelles (TMP) - RG 78

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
Formaldehyde 50-00-0 (2.5-5)		Group I	
Methyl alcohol 67-56-1 (< 1.5)	Prohibited and Restricted Substances	Group I	
Orthophosphoric acid 7664-38-2 (1-2)	Prohibited and Restricted Substances		
Sodium chloride 7647-14-5 (0.1-1)	Prohibited and Restricted Substances		

15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

SECTION 16: OTHER INFORMATION

SAFETY DATA SHEET

Formal saline phosphate buffered pH 7.3

Revision Date 18-Oct-2023

Full text of H-Statements referred to under sections 2 and 3

H290 - May be corrosive to metals
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H351 - Suspected of causing cancer
H301 - Toxic if swallowed
H311 - Toxic in contact with skin
H331 - Toxic if inhaled
H225 - Highly flammable liquid and vapor
H341 - Suspected of causing genetic defects
H350 - May cause cancer
H370 - Causes damage to organs

Legend

CAS - Chemical Abstracts Service

EINECS/ELINCS - European Inventory of Existing Commercial Chemical 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

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

DSL/NDL - 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

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 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.

Creation Date 18-Jan-2011

Revision Date 18-Oct-2023

Revision Summary Not applicable.

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

SAFETY DATA SHEET

Formal saline phosphate buffered pH 7.3

Revision Date 18-Oct-2023

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