SAFETY DATA SHEET

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

Creation Date 16-Nov-2010 **Revision Date** 29-Sep-2023 **Revision Number** 11

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

1.1. Product identifier

Product Description: Phenol/Chloroform/Isoamyl alcohol (25:24:1), stabilized
Cat No. : **327110000; 327115000**

Unique Formula Identifier (UFI) **WQQ8-H3EX-CX06-KPNQ**

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

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

Acute oral toxicity	Category 3 (H301)
Acute dermal toxicity	Category 3 (H311)
Acute Inhalation Toxicity - Vapors	Category 3 (H331)
Skin Corrosion/Irritation	Category 1 (H314) B
Serious Eye Damage/Eye Irritation	Category 1 (H318)
Germ Cell Mutagenicity	Category 2 (H341)
Carcinogenicity	Category 2 (H351)
Reproductive Toxicity	Category 2 (H361d)
Specific target organ toxicity - (single exposure)	Category 3 (H336)
Specific target organ toxicity - (repeated exposure)	Category 1 (H372)

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
H314 - Causes severe skin burns and eye damage
H336 - May cause drowsiness or dizziness
H341 - Suspected of causing genetic defects
H351 - Suspected of causing cancer
H361d - Suspected of damaging the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure
H301 + H311 + H331 - Toxic if swallowed, in contact with skin or if inhaled

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

Additional EU labelling
For use in industrial installations only

2.3. Other hazards

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 %	CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Chloroform	67-66-3	200-663-8	45-50	Acute Tox. 4 (H302) Acute Tox. 3 (H331) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H336) Carc. 2 (H351) Repr. 2 (H361d) STOT RE 1 (H372)
Phenol	108-95-2	EEC No. 203-632-7	45-50	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Muta. 2 (H341) STOT RE 2 (H373)
Isoamyl alcohol	123-51-3	EEC No. 204-633-5	1-3	Flam Liq. 3 (H226) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) (EUH066)

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Chloroform	STOT RE 2 : C ≥ 5 %	-	-
Phenol	Eye Irrit. 2 (H319) :: 1%<=C<3% Skin Corr. 1B (H314) :: C>=3% Skin Irrit. 2 (H315) :: 1%<=C<3%	-	-

Components	Reach Registration Number	
Chloroform	01-2119486657-20	
Phenol	01-2119471329-32	

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. In 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. 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: RAPIDLY ABSORBED THROUGH SKIN: Systemic Toxicity: Causes central nervous system depression: Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing: Exposure through inhalation may result in delayed pulmonary edema, which may be fatal: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. Signs of overdose include stupor and respiratory depression. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Symptoms may be delayed.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media
CO_2, 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.

Hazardous Combustion Products
Carbon monoxide (CO), Carbon dioxide (CO_2), Thermal decomposition can lead to release of irritating gases and vapors, Phosgene, Hydrogen chloride gas.

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.

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. 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.

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 6.1C
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
Chloroform	TWA: 2 ppm TWA: 9.9 mg/m³ STEL: 6 ppm STEL: 29.7 mg/m³	TWA: 2 ppm 8 hr TWA: 10 mg/m³ 8 hr Possibility of significant uptake through the skin	TWA: 2 ppm 8 hr. TWA: 9.8 mg/m³ 8 hr. STEL: 6 ppm 15 min STEL: 29.4 mg/m³ 15 min Skin
Phenol	STEL: 4 ppm 15 min STEL: 16 mg/m³ 15 min TWA: 2 ppm 8 hr TWA: 7.8 mg/m³ 8 hr Skin	TWA: 2 ppm (8h) TWA: 8 mg/m³ (8h) STEL: 4 ppm (15min) STEL: 16 mg/m³ (15min) Skin	TWA: 2 ppm 8 hr. TWA: 8 mg/m³ 8 hr. STEL: 4 ppm 15 min STEL: 16 mg/m³ 15 min Skin
Isoamyl alcohol	STEL: 125 ppm 15 min STEL: 458 mg/m³ 15 min TWA: 100 ppm 8 hr TWA: 366 mg/m³ 8 hr		TWA: 5 ppm 8 hr. TWA: 18 mg/m³ 8 hr. STEL: 10 mg/m³ 15 min STEL: 37 ppm 15 min

Biological limit values
List source(s):

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)
Chloroform 67-66-3 (45-50)				DNEL = 0.94mg/kg bw/day
Phenol 108-95-2 (45-50)				DNEL = 1.23mg/kg bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Chloroform 67-66-3 (45-50)		DNEL = 333mg/m^3	DNEL = 2.5mg/m^3	DNEL = 2.5mg/m^3
Phenol 108-95-2 (45-50)	DNEL = 16mg/m^3			DNEL = 8mg/m^3
Isoamyl alcohol 123-51-3 (1-3)	DNEL = 292mg/m^3		DNEL = 73.16mg/m^3	

Predicted No Effect Concentration (PNEC)
See values below.

Component	Fresh water	Fresh water sediment	Water Intermittent	Microorganisms in sewage treatment	Soil (Agriculture)
Chloroform 67-66-3 (45-50)	PNEC = 0.146mg/L	PNEC = 0.45mg/kg sediment dw	PNEC = 0.133mg/L	PNEC = 0.048mg/L	PNEC = 0.56mg/kg soil dw
Phenol 108-95-2 (45-50)	PNEC = 0.0077mg/L	PNEC = 0.0915mg/kg sediment dw	PNEC = 0.031mg/L	PNEC = 2.1mg/L	PNEC = 0.136mg/kg soil dw
Isoamyl alcohol 123-51-3 (1-3)	PNEC = 0.12mg/L	PNEC = 0.496mg/kg sediment dw	PNEC = 1.2mg/L	PNEC = 37mg/L	PNEC = 0.0287mg/kg soil dw

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Chloroform 67-66-3 (45-50)	PNEC = 0.015mg/L	PNEC = 0.09mg/kg sediment dw			
Phenol 108-95-2 (45-50)	PNEC = 0.00077mg/L	PNEC = 0.00915mg/kg sediment dw			
Isoamyl alcohol 123-51-3 (1-3)	PNEC = 0.012mg/L	PNEC = 0.0496mg/kg sediment dw			

8.2. Exposure controls

Engineering Measures
Ensure adequate ventilation, especially in confined areas. 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
Viton (R)	See manufacturers recommendations	-	EN 374	(minimum requirement)

Skin and body protection Long sleeved clothing.

Inspect gloves before use.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)
Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. 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: Organic gases and vapours filter Type A Brown conforming to EN14387 low boiling organic solvent Type AX Brown conforming to EN371 or

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

Physical State	Liquid	
Appearance	Yellow	
Odor	No information available	
Odor Threshold	No data available	
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	Liquid
Explosion Limits	No data available	
Flash Point	No information available	**Method -** No information available
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	
pH	3.0-8.2	
Viscosity	No data available	
Water Solubility	Partially miscible	
Solubility in other solvents	No information available	

Partition Coefficient (n-octanol/water)

Component	log Pow
Chloroform	2

Phenol	1.5	
Isoamyl alcohol	1.35	
Vapor Pressure	No data available	
Density / Specific Gravity	1.280	
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

Sensitivity to light Moisture sensitive.

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

Acetone. Alkali metals. Aluminium.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO_2). Thermal decomposition can lead to release of irritating gases and vapors. Phosgene. Hydrogen chloride gas.

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	Category 3
Inhalation	Category 3

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Chloroform	LD50 = 908 mg/kg (rat) LD50 = 695 mg/kg (Rat) LD50 = 450 mg/kg (Rat)	LD50 > 20 g/kg (Rabbit)	LC50 = 10.5 mg/L (Rat) 4 h
Phenol	LD50 = 340 mg/kg (Rat)	LD50 = 630 mg/kg (Rabbit)	LC50 = 316 mg/m³ (Rat) 4 h
Isoamyl alcohol	LD50 = 5770 mg/kg (Rat)	LD50 = 3250 mg/kg (Rabbit)	LC50 > 2000 ppm (Rat) 8 h

(b) skin corrosion/irritation; Category 1 B

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;
Respiratory No data available
Skin No data available

(e) germ cell mutagenicity; Category 2

Substances which cause concern for man owing to possible mutagenic effects but for which the available information is not adequate for making a satisfactory assessment

(f) carcinogenicity; Category 2

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

Component	EU	UK	Germany	IARC
Chloroform				Group 2B
Phenol			Cat. 3B	

(g) reproductive toxicity; Category 2

(h) STOT-single exposure; Category 3

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

(i) STOT-repeated exposure; Category 1

Target Organs Central nervous system (CNS), Eyes, Respiratory system, Kidney, Heart, Liver, Skin.

(j) aspiration hazard; No data available

Symptoms / effects,both acute and delayed 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. RAPIDLY ABSORBED THROUGH SKIN. Systemic Toxicity. Causes central nervous system depression. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing. Exposure through inhalation may result in delayed pulmonary edema, which may be fatal. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

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 Contains a substance which is:. The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms.

Component	Freshwater Fish	Water Flea	Freshwater Algae
Chloroform	LC50: = 300 mg/L, 96h static	EC50 = 28.9 mg/L/48h	EC50 = 560 mg/L/48h

	(Poecilia reticulata) LC50: = 18 mg/L, 96h flow-through (Lepomis macrochirus) LC50: = 18 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: = 71 mg/L, 96h flow-through (Pimephales promelas)		
Phenol	4-7 mg/L LC50 96 h 32 mg/L LC50 96 h	EC50: 10.2 - 15.5 mg/L, 48h (Daphnia magna) EC50: 4.24 - 10.7 mg/L, 48h Static (Daphnia magna)	EC50: 187 - 279 mg/L, 72h static (Desmodesmus subspicatus) EC50: 0.0188 - 0.1044 mg/L, 96h static (Pseudokirchneriella subcapitata) EC50: = 46.42 mg/L, 96h (Pseudokirchneriella subcapitata)
Isoamyl alcohol	LC50 96 h 700 mg/L (rainbow trout)	EC50: = 260 mg/L, 48h (Daphnia magna)	EC50: = 181 mg/L, 96h (Desmodesmus subspicatus) EC50: = 493 mg/L, 72h (Desmodesmus subspicatus)

Component	Microtox	M-Factor
Chloroform	Photobacterium phosphoreum: EC50 = 520 mg/L/5 min Photobacterium phosphoreum: EC50 = 670 mg/L/15 min Photobacterium phosphoreum: EC50 = 670 mg/L/30min	
Phenol	EC50 21 - 36 mg/L 30 min EC50 = 23.28 mg/L 5 min EC50 = 25.61 mg/L 15 min EC50 = 28.8 mg/L 5 min EC50 = 31.6 mg/L 15 min	
Isoamyl alcohol	EC50 = 2500 mg/L 17 h	

12.2. Persistence and degradability

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

Component	log Pow	Bioconcentration factor (BCF)
Chloroform	2	1.4 - 13 dimensionless
Phenol	1.5	17.5 dimensionless 647 dimensionless
Isoamyl alcohol	1.35	No data available

12.4. Mobility in soil No information available .

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

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. Large amounts will affect pH and harm aquatic organisms.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

14.1. UN number	UN2810
14.2. UN proper shipping name	TOXIC LIQUID, ORGANIC, N.O.S.
Technical Shipping Name	(PHENOL, CHLOROFORM)
14.3. Transport hazard class(es)	6.1
14.4. Packing group	II

ADR

14.1. UN number	UN2810
14.2. UN proper shipping name	TOXIC LIQUID, ORGANIC, N.O.S.
Technical Shipping Name	(PHENOL, CHLOROFORM)
14.3. Transport hazard class(es)	6.1
14.4. Packing group	II

IATA

14.1. UN number	UN2810
14.2. UN proper shipping name	TOXIC LIQUID, ORGANIC, N.O.S.
Technical Shipping Name	(PHENOL, CHLOROFORM)
14.3. Transport hazard class(es)	6.1
14.4. Packing group	II

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
Chloroform	67-66-3	200-663-8	-	-	X	X	X	X	X
Phenol	108-95-2	203-632-7	-	-	X	X	X	X	X
Isoamyl alcohol	123-51-3	204-633-5	-	-	X	X	KE-23575	X	X

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Chloroform	67-66-3	X	ACTIVE	X	-	X	X	X
Phenol	108-95-2	X	ACTIVE	X	-	X	X	X
Isoamyl alcohol	123-51-3	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)
Chloroform	67-66-3	-	Use restricted. See item 32. (see *http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006R1907:EN:NOT* for restriction details)	-
Phenol	108-95-2	-	Use restricted. See item 75. (see link for restriction details)	-
Isoamyl alcohol	123-51-3	-	-	-

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
Chloroform	67-66-3	Not applicable	Not applicable
Phenol	108-95-2	Not applicable	Not applicable
Isoamyl alcohol	123-51-3	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

Component	ANNEX I - PART 1 List of chemicals subject to export notification procedure (referred to in Article 8)	ANNEX I - PART 2 List of chemicals qualifying for PIC notification (referred to in Article 11)	ANNEX I - PART 3 List of chemicals subject to the PIC procedure (referred to in Articles 13 and 14)
Chloroform	b — ban (for the category or	-	-

67-66-3 (45-50)	categories concerned) b — ban (for the category or categories concerned) i(2) — industrial chemical for public		

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012R0649&qid=1604065742303.

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 Directive 94/33/EC on the protection of young people at work
Take note of Dir 92/85/EC on the protection of pregnant and breastfeeding women at work

National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification Water endangering class = 3 (self classification)

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Chloroform	WGK 3	Class I : 20 mg/m³ (Massenkonzentration)
Phenol	WGK2	Class I : 20 mg/m³ (Massenkonzentration)
Isoamyl alcohol	WGK1	

Component	France - INRS (Tables of occupational diseases)
Chloroform	Tableaux des maladies professionnelles (TMP) - RG 12
Phenol	Tableaux des maladies professionnelles (TMP) - RG 14
Isoamyl alcohol	Tableaux des maladies professionnelles (TMP) - RG 84

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
Chloroform 67-66-3 (45-50)	Prohibited and Restricted Substances		Annex I - industrial chemical
Phenol 108-95-2 (45-50)	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
H301 - Toxic if swallowed
H311 - Toxic in contact with skin
H331 - Toxic if inhaled
H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage
H336 - May cause drowsiness or dizziness
H341 - Suspected of causing genetic defects
H351 - Suspected of causing cancer
H361d - Suspected of damaging the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure
EUH066 - Repeated exposure may cause skin dryness or cracking
H226 - Flammable liquid and vapor
H302 - Harmful if swallowed
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H335 - May cause respiratory irritation

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/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
OECD - Organisation for Economic Co-operation and Development
BCF - Bioconcentration factor
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)

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	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.
Chemical incident response training.

Creation Date	16-Nov-2010
Revision Date	29-Sep-2023
Revision Summary	SDS sections updated.

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

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Disclaimer

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End of Safety Data Sheet