VIRKON LSP

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4.0	30.09.2024	203000013815	Country / Language: GB / 6N (EN)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : VIRKON LSP

Product code : 000000000057804807

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

Use of the Substance/Mixture : Disinfectants

1.3 Details of the supplier of the safety data sheet

Company : LANXESS Limited
Tenax Road, Trafford Park
M17 1WT, Manchester
Great Britain

Responsible Department : +49 221 8885 2288
infosds@lanxess.com

1.4 Emergency telephone number

Emergency telephone number : For 24/7 multilingual emergency please call CHEMTREC EMEA: +44 20 3885 0382 and mention CCN 1001748.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Corrosive to metals, Category 1	H290: May be corrosive to metals.
Skin corrosion, Sub-category 1C	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.
Long-term (chronic) aquatic hazard, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms :

Signal word : Danger

Hazard statements :

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements :

Prevention:

P261 Avoid breathing mist or vapours.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

Response:

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.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.

Hazardous components which must be listed on the label:

acetic acid
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.
chlorocresol
2-phenylphenol (ISO)

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
acetic acid	64-19-7 200-580-7 607-002-00-6	Flam. Liq. 3; H226 Skin Corr. 1A; H314 Eye Dam. 1; H318	>= 20 - < 25
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.	85536-14-7 287-494-3	Acute Tox. 4; H302 Skin Corr. 1C; H314 Eye Dam. 1; H318 Aquatic Chronic 3; H412	>= 20 - < 25
chlorocresol	59-50-7 200-431-6 604-014-00-3	Acute Tox. 4; H302 Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1B; H317 STOT SE 3; H335 (Respiratory system) Aquatic Acute 1; H400 Aquatic Chronic 3; H412 _____ M-Factor (Acute aquatic toxicity): 1	>= 10 - < 20
2-phenylphenol (ISO)	90-43-7 201-993-5 604-020-00-6	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 (Respiratory system) Aquatic Acute 1; H400 Aquatic Chronic 1; H410 _____ M-Factor (Chronic aquatic toxicity): 1	>= 10 - < 20
tetrasodium ethylene diamine tetraacetate	64-02-8 200-573-9 607-428-00-2	Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Dam. 1; H318	>= 1 - < 3

		STOT RE 2; H373	

Specific Concentration limits (Regulation EC) No 1272/2008)

Chemical name	CAS-No. EC-No.	Classification	Concentration (%)
acetic acid	64-19-7 200-580-7	Skin Corr.1A; H314 Skin Corr.1B; H314 Skin Irrit.2; H315 Eye Irrit.2; H319	>= 90 % 25 - < 90 % 10 - < 25 % 10 - < 25 %

For explanation of abbreviations see section 16.
Disclaimer: EC numbers starting with 6, 7, 8, or 9 in this document are ECHA List Numbers used for internal reference and do not carry legal significance as typical EC Numbers in Safety Data Sheets.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

If inhaled : If unconscious, place in recovery position and seek medical advice.

In case of skin contact : Wash off with soap and plenty of water.
Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
Immediately flush eye(s) with plenty of water.
Continue rinsing eyes during transport to hospital.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Never give anything by mouth to an unconscious person.
Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed

Risks : May cause an allergic skin reaction.
Causes serious eye damage.
May cause respiratory irritation.

Causes severe burns.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Carbon dioxide (CO_2)
Carbon monoxide
Sulphur oxides
Halogenated compounds
Nitrogen oxides (NOx)
Metal oxides

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of aerosol.
Do not breathe vapours/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Do not smoke.
Provide sufficient air exchange and/or exhaust in work rooms.
Dispose of rinse water in accordance with local and national regulations.

Smoking, eating and drinking should be prohibited in the application area.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : General industrial hygiene practice.

When using do not eat or drink. When using do not smoke.
Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Further information on storage stability : Stable under recommended storage conditions.

Packaging material : Unsuitable material: Do not store in or use iron or steel containers.

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
acetic acid	64-19-7	STEL	20 ppm 50 mg/m3	GB EH40
		TWA	10 ppm 25 mg/m3	GB EH40
		TWA	10 ppm 25 mg/m3	2017/164/EU
	Further information: Indicative			
		STEL	20 ppm 50 mg/m3	2017/164/EU
	Further information: Indicative			

8.2 Exposure controls

Engineering measures

If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protective equipment

Eye/face protection : Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Hand protection
Material : Polychloroprene - CR
Wearing time : < 60 min

Material : Polyvinyl chloride - PVC
Wearing time : < 60 min

Material : Nitrile rubber - NBR
Wearing time : < 60 min

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves. After contamination with product change the gloves immediately and dispose of them according to relevant national and local regulations

Skin and body protection : Wear suitable protective clothing.

Impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

Filter type : Recommended Filter type:

Combined inorganic and acidic gas/vapour, ammonia/amines and organic vapour type (ABEK)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	clear
Physical state	:	liquid
Colour	:	brown
Odour	:	acidic
Odour Threshold	:	No data available
Melting point/ range	:	No data available
Boiling point/boiling range	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	> 104 °C Method: closed cup
Ignition temperature	:	No data available
Decomposition temperature	:	No data available
pH	:	2.5 - 3.0 Concentration: 1 %
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available

Solubility(ies)
Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Vapour pressure : No data available

Relative density : No data available

Density : 1.09 g/cm3 (20 °C)

Relative vapour density : No data available

9.2 Other information

Explosives : No data available

Oxidizing properties : No data available

Flammability (liquids) : No data available

Flammable solids
Burning number : No data available

Self-ignition : No data available

Metal corrosion rate : Corrosive to metals

Evaporation rate : No data available

Miscibility with water : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : Metals
Strong acids and strong bases

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified due to lack of data.

Product:

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Components:

acetic acid:

Acute oral toxicity : LD50 (Rat, male and female): 3,310 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): 11.4 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
GLP: No

Acute dermal toxicity : LD50 (Rabbit): 1,060 mg/kg

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.:

Acute oral toxicity : LD50 (Rat, male and female): 1,470 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 402
Remarks: Extrapolation according to Regulation (EC) No. 440/2008

chlorocresol:

Acute oral toxicity : LD50 (Rat, male): 1,830 mg/kg

Method: OECD Test Guideline 401
GLP: No

Acute inhalation toxicity : LC0 (Rat, male and female): > 2.871 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: Yes
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Highest producible concentration.

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: Yes

2-phenylphenol (ISO):

Acute oral toxicity : LD50 (Rat, male and female): 2,733 mg/kg
Method: OECD Test Guideline 401
GLP: Yes

Acute inhalation toxicity : LC0 (Rat, male and female): > 0.036 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: Yes
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Highest producible concentration.

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: Yes
Remarks: Extrapolation according to Regulation (EC) No. 440/2008

tetrasodium ethylene diamine tetraacetate:

Acute oral toxicity : LD50 (Rat, male and female): 1,780 - < 2,000 mg/kg
Method: OECD Test Guideline 401
GLP: No

Acute inhalation toxicity : LC50 (Rat): 1.5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 412
GLP: Yes

Skin corrosion/irritation

Causes severe burns.

Components:

acetic acid:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	Mild skin irritation
GLP	:	No information available.
Remarks	:	Aqueous solution

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days.

chlorocresol:

Result	:	Corrosive after 1 to 4 hours of exposure

2-phenylphenol (ISO):

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	Irritating to skin.

tetrasodium ethylene diamine tetraacetate:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Serious eye damage/eye irritation

Causes serious eye damage.

Components:

acetic acid:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Irreversible effects on the eye

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Risk of serious damage to eyes.

chlorocresol:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Risk of serious damage to eyes.

2-phenylphenol (ISO):

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Risk of serious damage to eyes.

tetrasodium ethylene diamine tetraacetate:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Risk of serious damage to eyes.

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified due to lack of data.

Components:

acetic acid:

Assessment	:	Did not cause sensitisation on laboratory animals.

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.:

Exposure routes	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitisation on laboratory animals.

chlorocresol:

Exposure routes	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Probability or evidence of low to moderate skin sensitisation rate in humans

2-phenylphenol (ISO):

Exposure routes	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.
GLP	:	No

tetrasodium ethylene diamine tetraacetate:

Exposure routes	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified due to lack of data.

Components:

acetic acid:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Rat (male and female)
Application Route: Inhalation
Method: Regulation (EC) No. 440/2008, Annex, B.12
Result: negative
GLP: Yes

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.:

Genotoxicity in vitro : Test system: Bacteria
Metabolic activation: with and without metabolic activation
Method: Regulation (EC) No. 440/2008, Annex, B.13/14 (Ames test)
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Method: OECD Test Guideline 474
Result: negative
GLP: Yes

chlorocresol:

Genotoxicity in vitro : Test system: Bacteria
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test system: Mammalian-Animal
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Test system: Mammalian-Animal
Method: OECD Test Guideline 482
Result: negative

Genotoxicity in vivo : Species: Mouse (male and female)
Application Route: Intraperitoneal
Method: OECD Test Guideline 474
Result: negative

2-phenylphenol (ISO):

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: Yes

Test system: Mammalian-Animal
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: No

Test system: Mammalian-Animal
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: Yes

Test Type: Micronucleus test
Test system: Chinese hamster cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 487
Result: negative
GLP: Yes

Genotoxicity in vivo : Species: Mouse (male)
Application Route: Oral
Result: negative

Test Type: Micronucleus test
Species: Rat (male)
Cell type: Bone marrow
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

tetrasodium ethylene diamine tetraacetate:

Genotoxicity in vitro : Test Type: Ames test
Test system: Bacteria
Metabolic activation: with and without metabolic activation
Result: negative

Carcinogenicity

Not classified due to lack of data.

Components:

chlorocresol:

Species	:	Rat, male and female
Application Route	:	Oral
Exposure time	:	104 weeks
NOAEL	:	558.9
Method	:	OECD Test Guideline 453

2-phenylphenol (ISO):

Species	:	Rat, male
Application Route	:	Oral
Exposure time	:	2 Years
NOAEL	:	200 mg/kg body weight
Method	:	OECD Test Guideline 453
Result	:	negative
GLP	:	Yes

Species	:	Rat, female
Application Route	:	Oral
Exposure time	:	2 Years
NOAEL	:	>= 647 mg/kg body weight
Method	:	OECD Test Guideline 453
Result	:	negative
GLP	:	Yes

Reproductive toxicity

Not classified due to lack of data.

Components:

acetic acid:

Effects on foetal development	:	Species: Rabbit, female Application Route: Oral Dose: 1600 milligram per kilogram Duration of Single Treatment: 13 d General Toxicity Maternal: NOAEL: 1,600 mg/kg body weight Embryo-foetal toxicity: NOAEL: 1,600 mg/kg body weight Method: Regulation (EC) No. 440/2008, Annex, B.31 Result: No adverse effects

chlorocresol:

Effects on fertility	:	Species: Rat, male and female Application Route: Oral General Toxicity F1: NOAEL: 247.8 mg/kg body weight Fertility: NOAEL: 1,043 mg/kg body weight Method: OECD Test Guideline 416
Effects on foetal development	:	Species: Rat, female Application Route: Oral Developmental Toxicity: NOAEL: 100 mg/kg body weight Method: OECD Test Guideline 414

2-phenylphenol (ISO):

Effects on fertility	:	Species: Rat, male and female Application Route: Oral Duration of Single Treatment: 175 d Fertility: NOAEL: >= 500 mg/kg bw/day Method: OECD Test Guideline 416 Result: No effects on fertility and early embryonic development were detected. GLP: Yes
Effects on foetal development	:	Species: Rat Application Route: Oral Duration of Single Treatment: 28 d Developmental Toxicity: NOAEL: 250 mg/kg bw/day Method: OECD Test Guideline 414

STOT - single exposure

May cause respiratory irritation.

Components:

chlorocresol:

Assessment	:	May cause respiratory irritation.

2-phenylphenol (ISO):

Assessment	:	May cause respiratory irritation.

STOT - repeated exposure

Not classified due to lack of data.

Components:

tetrasodium ethylene diamine tetraacetate:

Exposure routes	:	Inhalation
Assessment	:	May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.:

Species	:	Rat, male and female
NOAEL	:	40 mg/kg
Application Route	:	Oral
GLP	:	No
Remarks	:	Subchronic toxicity
Species	:	Rat, male and female
LOAEL	:	115 mg/kg

Application Route	:	Oral
GLP	:	No
Remarks	:	Subchronic toxicity

chlorocresol:

Species	:	Rat, male
NOAEL	:	120 mg/kg
Application Route	:	Oral
Exposure time	:	90 d
Number of exposures	:	daily
Method	:	OECD Test Guideline 408
Remarks	:	Subchronic toxicity

Species	:	Rat, male and female
NOAEL	:	500 mg/kg
Application Route	:	Dermal
Exposure time	:	90 d
Number of exposures	:	daily
Method	:	OECD Test Guideline 411
Remarks	:	Subchronic toxicity

2-phenylphenol (ISO):

Species	:	Rat, male
LOAEL	:	200 mg/kg
Application Route	:	Oral
Exposure time	:	2 yr
Method	:	OECD Test Guideline 453
GLP	:	Yes
Remarks	:	Chronic toxicity

Species	:	Rat, female
LOAEL	:	647 mg/kg
Application Route	:	Oral
Exposure time	:	2 yr
Method	:	OECD Test Guideline 453
GLP	:	Yes
Remarks	:	Chronic toxicity

Species	:	Rat, male and female
NOAEL	:	>= 1,000 mg/kg
Application Route	:	Dermal
Exposure time	:	21 d
Method	:	OECD Test Guideline 410
GLP	:	Yes
Remarks	:	Subacute toxicity

Aspiration toxicity

Not classified due to lack of data.

Further information

Product:

Remarks : No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

acetic acid:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): > 300.82 mg/l
Exposure time: 96 h
Test Type: semi-static test
Analytical monitoring: No
Method: OECD Test Guideline 203
GLP: Yes
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 300.82 mg/l
Exposure time: 48 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 202
GLP: Yes
Remarks: Fresh water

Toxicity to algae/aquatic plants : EC50 (Skeletonema costatum (marine diatom)): > 300.82 mg/l
End point: Growth rate
Exposure time: 72 h
Analytical monitoring: No
Method: ISO 10253
GLP: Yes
Remarks: salt water

Toxicity to microorganisms : NOEC (Pseudomonas putida): 1,150 mg/l
Exposure time: 16 h
Remarks: Fresh water

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 1.67 mg/l
Exposure time: 96 h
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.9 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Fresh water

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 29 mg/l
Exposure time: 96 h
Remarks: Fresh water

NOEC (Pseudokirchneriella subcapitata (microalgae)): 0.5

mg/l
Exposure time: 96 h
Remarks: Fresh water

Toxicity to fish (Chronic toxicity) : NOEC: 1 mg/l
Exposure time: 28 d
Species: Lepomis macrochirus (Bluegill sunfish)
Method: OECD Test Guideline 204
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 1.18 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211
Remarks: Fresh water

chlorocresol:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.917 mg/l
Exposure time: 96 h
Method: EPA OPP 72-1 (Fish Acute Toxicity Test)

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.29 mg/l
Exposure time: 48 h
Method: OPP 72-2 (Aquatic Invertebrate Acute Toxicity Test)

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 30.62 mg/l
End point: Growth rate
Exposure time: 72 h
Method: OECD Test Guideline 201

NOEC (Desmodesmus subspicatus (green algae)): 9.8 mg/l
End point: Growth rate
Exposure time: 72 h
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : EC50 (activated sludge): 41.4 mg/l
End point: Respiration rates.
Exposure time: 3 h
Method: OECD Test Guideline 209

Toxicity to fish (Chronic toxicity) : NOEC: 0.15 mg/l
Exposure time: 28 d
Species: Oncorhynchus mykiss (rainbow trout)
Method: OECD Test Guideline 215

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.32 mg/l
End point: Reproduction
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211

2-phenylphenol (ISO):

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 4.5 mg/l Exposure time: 96 h GLP: Yes Remarks: Fresh water
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 2.7 mg/l Exposure time: 48 h Remarks: Fresh water
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (microalgae)): 3.57 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 GLP: Yes Remarks: Fresh water NOEC (Pseudokirchneriella subcapitata (microalgae)): 0.468 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 GLP: Yes Remarks: Fresh water
Toxicity to fish (Chronic toxicity)	:	NOEC: 0.036 mg/l Exposure time: 21 d Species: Pimephales promelas (fathead minnow) GLP: Yes Remarks: Fresh water
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0.009 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211 GLP: Yes Remarks: Fresh water
M-Factor (Chronic aquatic toxicity)	:	1

tetrasodium ethylene diamine tetraacetate:

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 121 mg/l Exposure time: 96 h Remarks: Fresh water
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 610 mg/l Exposure time: 24 h Method: ISO 6341 Remarks: Fresh water
Toxicity to algae/aquatic	:	ErC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l

plants		Exposure time: 72 h Remarks: Fresh water NOEC (Desmodesmus subspicatus (green algae)): 100 mg/l Exposure time: 72 h Remarks: Fresh water
Toxicity to fish (Chronic toxicity)	:	NOEC: > 25.7 mg/l Exposure time: 35 d Species: Danio rerio (zebra fish) Method: OECD Test Guideline 210 Remarks: Fresh water
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 25 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211 Remarks: Fresh water

12.2 Persistence and degradability

Components:

acetic acid:

Biodegradability	:	Result: Readily biodegradable.

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 94 % Exposure time: 28 d Method: OECD Test Guideline 301A GLP: Yes

chlorocresol:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 85 % Exposure time: 28 d Method: OECD Test Guideline 301D

2-phenylphenol (ISO):

Biodegradability	:	Test Type: aerobic Result: Readily biodegradable. Biodegradation: 70.8 - 75.7 % Exposure time: 28 d Method: OECD Test Guideline 301B GLP: Yes

tetrasodium ethylene diamine tetraacetate:

Biodegradability	:	Result: Not readily biodegradable. Biodegradation: 10 %

Exposure time: 28 d
Method: OECD Test Guideline 302B

12.3 Bioaccumulative potential

Components:

acetic acid:

Partition coefficient: n-octanol/water : log Pow: -0.17

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.:

Partition coefficient: n-octanol/water : log Pow: 2.2
Method: OECD Test Guideline 123

chlorocresol:

Partition coefficient: n-octanol/water : log Pow: 2.73 (25 °C)
pH: 7.2
Method: OECD Test Guideline 107

2-phenylphenol (ISO):

Bioaccumulation : Bioconcentration factor (BCF): 22

Partition coefficient: n-octanol/water : log Pow: 3.18
Method: OECD Test Guideline 107

tetrasodium ethylene diamine tetraacetate:

Bioaccumulation : Bioconcentration factor (BCF): 1.8

Partition coefficient: n-octanol/water : log Pow: -13.17 (25 °C)

12.4 Mobility in soil

Components:

2-phenylphenol (ISO):

Distribution among environmental compartments : log Koc: 2.4 - 2.6

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Endocrine disrupting potential	:	This substance/mixture does not contain components considered to have endocrine disrupting properties for environment according to UK REACH Article 57(f).
Additional ecological information	:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	:	Do not contaminate ponds, waterways or ditches with chemical or used container. The product should not be allowed to enter drains, water courses or the soil. Send to a licensed waste management company.
Contaminated packaging	:	Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number

ADN	:	UN 3265
ADR	:	UN 3265
RID	:	UN 3265
IMDG	:	UN 3265
IATA	:	UN 3265

14.2 UN proper shipping name

ADN	:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ACETIC ACID, ALKYLBENZENE SULFONIC ACID, 2-PHENYLPHENOL)
ADR	:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ACETIC ACID, ALKYLBENZENE SULFONIC ACID, 2-PHENYLPHENOL)
RID	:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ACETIC ACID, ALKYLBENZENE SULFONIC ACID, 2-PHENYLPHENOL)
IMDG	:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

(ACETIC ACID, ALKYLBENZENE SULFONIC ACID, 2-PHENYLPHENOL)

IATA : Corrosive liquid, acidic, organic, n.o.s.
(ACETIC ACID, ALKYLBENZENE SULFONIC ACID, 2-PHENYLPHENOL)

14.3 Transport hazard class(es)

ADN : 8

ADR : 8

RID : 8

IMDG : 8

IATA : 8

14.4 Packing group

ADN
Packing group : III
Classification Code : C3
Hazard Identification Number : 80
Labels : 8
:

ADR
Packing group : III
Classification Code : C3
Hazard Identification Number : 80
Labels : 8
:

Tunnel restriction code : (E)

RID
Packing group : III
Classification Code : C3
Hazard Identification Number : 80
Labels : 8
:

IMDG
Packing group : III
Labels : 8

:

EmS Code : F-A, S-B

IATA (Cargo)

Packing instruction (cargo aircraft) : 856 : 60.00 L

Packing group : III

Labels : 8

:

IATA (Passenger)

Packing instruction (passenger aircraft) : 852 : 5.00 L

Packing group : III

Labels : 8

:

14.5 Environmental hazards

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Passenger)
Environmentally hazardous : yes

IATA (Cargo)
Environmentally hazardous : yes

14.6 Special precautions for user

Hazard and Handling Notes. : Slightly corrosive.
Environmentally hazardous substance.
Keep away from foodstuffs, acids and alkalis.

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17)	:	Conditions of restriction for the following entries should be considered: Number on list 3
UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation	:	Not applicable
The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain)	:	Not applicable
International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors	:	Not applicable

Regulation (EC) on substances that deplete the ozone layer	:	Not applicable
Council Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors.	:	sulphuric acid
Council Regulation (EC) No 273/2004 on drug precursors	:	sulphuric acid
UK REACH List of substances subject to authorisation (Annex XIV)	:	Not applicable
GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation	:	Not applicable

Control of Major Accident Hazards Regulations 2015 (COMAH)

		Quantity 1	Quantity 2
E2	ENVIRONMENTAL HAZARDS	200 t	500 t

Other regulations:

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Full text of H-Statements

H226	:	Flammable liquid and vapour.
H302	:	Harmful if swallowed.
H314	:	Causes severe skin burns and eye damage.
H315	:	Causes skin irritation.
H317	:	May cause an allergic skin reaction.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H332	:	Harmful if inhaled.
H335	:	May cause respiratory irritation.
H373	:	May cause damage to organs through prolonged or repeated exposure if inhaled.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.
H412	:	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity

Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Flam. Liq.	:	Flammable liquids
Skin Corr.	:	Skin corrosion
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitisation
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure
2017/164/EU	:	Europe. Commission Directive 2017/164/EU establishing a fourth list of indicative occupational exposure limit values
GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits
2017/164/EU / STEL	:	Short term exposure limit
2017/164/EU / TWA	:	Limit Value - eight hours
GB EH40 / TWA	:	Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL	:	Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture: **Classification procedure:**

Met. Corr. 1	H290	Based on product data or assessment
Skin Corr. 1C	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
STOT SE 3	H335	Calculation method
Aquatic Chronic 2	H411	Calculation method

The data contained in this Safety Data Sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. 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 to be a guidance for processing and does not contain any 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. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.

Relevant changes from the previous version are marked on the left side of the Safety Data Sheet with a black double bar in appropriate places.