

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Divosan Activ VT5

Revision: 2022-12-22 **Version:** 07.0

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

1.1 Product identifier

Trade name: Divosan Activ VT5

UFI: 59H4-T0DQ-200J-J6N6

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

Product use: Cleaning in place chemical.

Open plant cleaning chemical. for general surface disinfection for food contact surface disinfection

For industrial use only...

Uses advised against: Uses other than those identified are not recommended.

\mbox{SWED} - Sector-specific worker exposure description : $\mbox{AISE_SWED_PW}_8a_1$

AISE_SWED_PW_8a_ AISE_SWED_IS_1_1 AISE_SWED_IS_8b_1 AISE_SWED_IS_4_1 AISE_SWED_IS_7_5

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

Contact details

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

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Regulatory Email: customerservice.uk@diversey.com

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible)

For medical or environmental emergency only:

call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Ox. Liq. 2 (H272) Skin Corr. 1A (H314) Acute Tox. 4 (H332) Acute Tox. 4 (H302) Acute Tox. 4 (H312) STOT SE 3 (H335) Eye Dam. 1 (H318) Aquatic Chronic 1 (H410) Met. Corr. 1 (H290)

2.2 Label elements



Signal word: Danger.

Contains hydrogen peroxide (Hydrogen Peroxide), acetic acid (Acetic Acid), peracetic acid (Peracetic Acid)

Hazard statements:

H272 - May intensify fire; oxidiser.

H290 - May be corrosive to metals.

H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.

H314 - Causes severe skin burns and eye damage.

H410 - Very toxic to aquatic life with long lasting effects.

H335 - May cause respiratory irritation.

Precautionary statements:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P221 - Take any precaution to avoid mixing with combustibles.

P260 - Do not breathe vapours.

P280 - Wear protective gloves, protective clothing and eye or face protection.

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 CENTRE, doctor or physician.

2.3 Other hazards

Regulation (EU) 2019/1148 - restricted explosives precursor.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
hydrogen peroxide	231-765-0	7722-84-1	[6]	Ox. Liq. 1 (H271) Skin Corr. 1A (H314) Acute Tox. 4 (H302) Acute Tox. 4 (H332) STOT SE 3 (H335) Aquatic Chronic 3 (H412)		20-30
acetic acid	200-580-7	64-19-7	01-2119475328-30	Flam. Liq. 3 (H226) Skin Corr. 1A (H314)		10-20
peracetic acid	201-186-8	79-21-0	[6]	Org. Perox. D (H242) Flam. Liq. 3 (H226) Skin Corr. 1A (H314) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 M=10 (H410)		3-10

Specific concentration limits

hydrogen peroxide:

• Skin Corr. 1A (H314) >= 8% > Eye Irrit. 2 (H319) >= 5%
• Skin Corr. 1A (H314) >= 70% > Skin Corr. 1B (H314) >= 50% > Skin Irrit. 2 (H315) >= 35%

• STOT SE 3 (H335) >= 35%

• Eye Dam. 1 (H318) >= 25% > Eye Irrit. 2 (H319) >= 10%

• Skin Corr. 1A (H314) >= 90% > Skin Corr. 1B (H314) >= 25% > Skin Irrit. 2 (H315) >= 10% peracetic acid:
• STOT SE 3 (H335) >= 1%

Workplace exposure limit(s), if available, are listed in subsection 8.1.

ATE, if available, are listed in section 11.

[6] Exempted: biocidal active. See Article 15(2) of Regulation (EC) No 1907/2006.

For the full text of the H and EUH phrases mentioned in this Section, see Section 16..

SECTION 4: First aid measures

4.1 Description of first aid measures

General Information:

Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident. If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTRE, doctor or physician.

Inhalation: Skin contact:

Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before reuse. Immediately call a POISON CENTRE, doctor or physician. If skin irritation occurs: Get

medical advice or attention.

Eye contact: Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE,

doctor or physician.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious

person. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or

physician. Get medical attention or advice if you feel unwell.

Self-protection of first aider: Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: Corrosive to the respiratory tract.

Skin contact: Causes severe burns.

Eye contact: Causes severe or permanent damage.

Ingestion: Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of

oesophagus and stomach.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Do not breathe dust or vapour. Wear suitable protective clothing. Wear eye/face protection. Wear suitable gloves.

6.2 Environmental precautions

Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up

Ensure adequate ventilation. Dyke to collect large liquid spills. Absorb onto dry sand or similar inert material. Do not use fabric, sawdust, paper or other inflammable materials (danger of spontaneous combustion). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire and explosions:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use non-sparking tools.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Do not breathe vapours. Do not breathe spray. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging. Keep from freezing. Keep away from heat and direct sunlight. Keep at temperature not exceeding 35 °C.

For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

Comah - Lower Tier requirements (tonnes): 50 Comah - Upper Tier requirements (tonnes): 200

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters Workplace exposure limits

Air limit values, if available:

Ingredient(s)	UK - Long term value(s)	UK - Short term value(s)
hydrogen peroxide	1 ppm 1.4 mg/m ³	2 ppm 2.8 mg/m ³
acetic acid	10 ppm 25 mg/m ³	20 ppm 50 mg/m ³

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and **PNEC** values

Human exposure
DNEL/DMEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
hydrogen peroxide	-	-	-	-
acetic acid	-	-	-	-
peracetic acid	-	1.25	-	1.25

DNEL/DMEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
hydrogen peroxide	-	-	-	-
acetic acid	-	-	-	-
peracetic acid	0.12 %	-	-	-

DNEL/DMEL dermal exposure - Consumer

DIVER DIVIEL dermai exposure Consumer				
Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
		and the territory	***************************************	the tree (mg/mg/m/
hydrogen peroxide	-	-	-	-
acetic acid	-	-	-	-
peracetic acid	0.12 %	-	-	-

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
hydrogen peroxide	3	-	1.4	-
acetic acid	25	-	25	-
peracetic acid	0.6	0.6	0.6	0.6

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
hydrogen peroxide	1.93	-	0.21	-
acetic acid	25	-	25	-
peracetic acid	0.3	0.6	0.6	0.6

Environmental exposure

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
hydrogen peroxide	0.0126	0.0126	0.0138	4.66
acetic acid	3.058	0.3058	30.58	85
peracetic acid	0.000224	0.0000049	0.0016	0.051

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
hydrogen peroxide	0.047	0.047	0.0023	-
acetic acid	11.36	1.136	0.47	-

peracetic acid	0.00018	0.000015	0.320	-

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the <u>undiluted</u> product:

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin

contact, the personal protection equipment as described in this section is not required.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Automatic application in a dedicated closed system	AISE_SWED_IS_1_1	IS	PROC 1	480	ERC4
Automatic transfer and dilution	AISE_SWED_IS_8b_1	IS	PROC 8b	60	ERC4
Manual transfer and dilution	AISE_SWED_PW_8a_1	PW	PROC 8a	60	ERC8a

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is

strongly recommended when handling open containers or if splashes may occur.

Hand protection: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and

breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such

as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material

thickness: ≥ 0.7 mm

Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min

Material thickness: ≥ 0.4 mm

In consultation with the supplier of protective gloves a different type providing similar protection may

be chosen.

Body protection: Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may

occur (EN 14605).

Respiratory protection: If exposure to liquid particles or splashes cannot be avoided use: half mask (EN 140) with particle

filter P2 (EN 143) or full-face mask (EN 136) with particle filter P1 (EN 143) Consider specific local use conditions. In consultation with the supplier of respiratory protection equipment a different type providing similar protection may be chosen. Specific applications tools may be available to limit exposure. Please refer to the product information sheet for the possibilities. Apply technical

measures to comply with the occupational exposure limits, if available.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted or unneutralised.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 4

Appropriate engineering controls: Provide a good standard of general ventilation.

Appropriate organisational controls: No special requirements under normal use conditions.

REACH use scenarios considered for the diluted product:

	SWED	LCS	PROC	Duration (min)	ERC
Automatic application in a dedicated system	AISE_SWED_IS_4_1	IS	PROC 4	480	ERC8a
Spray application	AISE_SWED_IS_7_5	IS	PROC 7	480	ERC4

Personal protective equipment

Eye / face protection:No special requirements under normal use conditions.Hand protection:No special requirements under normal use conditions.Body protection:No special requirements under normal use conditions.Respiratory protection:No special requirements under normal use conditions.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Information in this section refers to the product, unless it is specifically stated that substance data is listed

Method / remark

Physical state: Liquid
Colour: Clear , Colourless
Odour: Product specific
Odour threshold: Not applicable

Melting point/freezing point (°C): -30 Not relevant to classification of this product

Initial boiling point and boiling range (°C): Not determined See substance data

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
hydrogen peroxide	150.2	Method not given	
acetic acid	103	Method not given	
peracetic acid	No data available		

Method / remark

Flammability (solid, gas): Not applicable to liquids

Flammability (liquid): Not flammable.

Flash point (°C): > 74 °C closed cup

Sustained combustion: Not applicable. (UN Manual of Tests and Criteria, section 32, L.2)

Lower and upper explosion limit/flammability limit (%): Not determined See substance data

Substance data, flammability or explosive limits, if available:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
acetic acid	4	17

Method / remark

Autoignition temperature: Not determined

Decomposition temperature: > 60 (°C) SADT (self-accelerating decomposition temperature) pH: =< 2 (neat) ISO 4316 Dilution pH: \approx 3 (4 %) ISO 4316

Kinematic viscosity: Not determined

Solubility in / Miscibility with water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
hydrogen peroxide	1000	Method not given	20
acetic acid	Soluble	Method not given	
peracetic acid	No data available		

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Method / remark

Vapour pressure: Not determined See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)	
hydrogen peroxide	214	Method not given	20	
acetic acid	1500	Method not given	20	
peracetic acid	No data available			

Method / remark

Relative density: ≈ 1.11 (20 °C) OECD 109 (EU A.3)

Relative vapour density: No data available.

Not relevant to classification of this product

Particle characteristics: No data available. Not applicable to liquids.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties: Not explosive.

Oxidising properties: May intensify fire; oxidiser. Weight of evidence

Corrosion to metals: Corrosive

9.2.2 Other safety characteristicsNo other relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

None known under normal storage and use conditions.

10.5 Incompatible materials

Keep away from clothing and other combustible materials. May be corrosive to metals. Reacts with alkali. Keep away from products containing chlorine-based bleaching agents or sulphites.

Method Weight of evidence

Method Weight of evidence

10.6 Hazardous decomposition products

Oxygen.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:.

Acute oral toxicity

LD50 Oral 1020 mg/L Species Rat
Acute dermal toxicity
LD50 Dermal 1147 mg/L US EPA Species Rabbit

(rabbit)

Acute inhalation toxicity

LC50 (Vapour) .? (mist) Method Weight of evidence

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000 ATE - Inhalatory, mists (mg/l): 2.5

Substance data, where relevant and available, are listed below:.

Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	ATE
		(mg/kg)			time (h)	(mg/kg)
hydrogen peroxide	LD 50	> 300-2000	Rat	Weight of evidence		2100
acetic acid	LD 50	3310	Rat	Weight of evidence		Not established
peracetic acid	LD 50	> 50-2000	Rat	Substance was tested as 5 % aqueous		10000
				solution OECD 401 (EU B.1)		

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
hydrogen peroxide	LD 50	> 2000	Rabbit	Substance was tested as 35 % aqueous solution		Not established
acetic acid		No data available				Not established
peracetic acid	LD 50	1147	Rabbit	EPA OPP 81-2 Substance was tested as 5 % aqueous solution		22000

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure
		(mg/l)			time (h)
hydrogen peroxide	LC₀	No mortality	Rat	Method not given	4
		observed		_	
		(vapour)			
acetic acid	LC 50	> 40	Rat	Weight of evidence	4

ſ	peracetic acid	LC 50	> 0.05-0.5	Rat	EPA OPP 81-3	
			(dust) (mist)		Substance was tested	
					as 5 % aqueous	
					solution	

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
hydrogen peroxide	Not established	13	13	Not established
acetic acid	Not established	Not established	Not established	Not established
peracetic acid	Not established	Not established	12	Not established

Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
hydrogen peroxide	Corrosive	Rabbit	Method not given	
acetic acid	Corrosive	Rabbit	OECD 404 (EU B.4)	
peracetic acid	Corrosive	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
hydrogen peroxide	Corrosive	Rabbit	Method not given	
acetic acid	Severe damage	Rabbit	OECD 405 (EU B.5)	
peracetic acid	Corrosive	Rabbit	Method not given	

Respiratory tract irritation and corrosivity

Respiratory tract irritation and corrosivity				
Ingredient(s)	Result	Species	Method	Exposure time
hydrogen peroxide	Irritating to		Method not given	
	respiratory tract		_	
acetic acid	No data available			
peracetic acid	Irritating to respiratory tract	Rat	Method not given	

Sensitisation Sensitisation by skin contact

Sensitisation by skin contact				
Ingredient(s)	Result	Species	Method	Exposure time (h)
hydrogen peroxide	Not sensitising	Guinea pig	Method not given	
acetic acid	Not sensitising		Method not given	
peracetic acid	Not sensitising	Guinea pig	OECD 406 (EU B.6) /	
			Buehler test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
hydrogen peroxide	No data available			
acetic acid	No data available			
peracetic acid	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity				
Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
hydrogen peroxide	No evidence for mutagenicity		No evidence of genotoxicity, negative test results	Method not given
acetic acid	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
peracetic acid	No evidence for mutagenicity, negative test results	,	No evidence for mutagenicity, negative test results	Method not given

Carcinogenicity

Ingredient(s)	Effect
hydrogen peroxide	No evidence for carcinogenicity, negative test results
acetic acid	No evidence for carcinogenicity, negative test results
peracetic acid	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
hydrogen peroxide			No data available	-			No evidence for reproductive toxicity
acetic acid			No data				No evidence for reproductive

		available			toxicity
peracetic acid	NOAEL	200	Rat	Not known	

Repeated dose toxicity
Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
hydrogen peroxide	NOAEL	100	Mouse	OECD 408 (EU B.26)	90	
acetic acid		No data available				
peracetic acid	NOAEL	23.4	Rat	Weight of evidence	90	No adverse effects observed

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method		Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
hydrogen peroxide		No data				
		available				
acetic acid		No data				
		available				
peracetic acid		No data				
		available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
hydrogen peroxide	NOAEL	7	Mouse	OECD 413 (EU B.29)	28	
acetic acid		No data available		·		
peracetic acid		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
hydrogen peroxide	Touto		No data			tiiiio	organio arrootoa	
, ga p			available					
acetic acid			No data					
			available					
peracetic acid			No data				_	
			available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
hydrogen peroxide	No data available
acetic acid	No data available
peracetic acid	Not applicable

5 TO 1-repeated exposure	
Ingredient(s)	Affected organ(s)
hydrogen peroxide	No data available
acetic acid	No data available
peracetic acid	No data available

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties
Endocrine disrupting properties - Human data, if available:

11.2.2 Other information

No other relevant information available.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
hydrogen peroxide	LC 50	16.4	Pimephales promelas	EPA-OPPTS 850.1075	96
acetic acid	LC 50	75	Lepomis macrochirus	Method not given	96
peracetic acid	LC 50	13	Fish	OECD 203, semi-static	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
hydrogen peroxide	EC 50	2.4	Daphnia pulex	Method not given	48
acetic acid	EC 50	95	Daphnia magna Straus	Method not given	24
peracetic acid	EC 50	0.73-3.3	Daphnia magna Straus	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
hydrogen peroxide	EC 50	1.38	Chlorella vulgaris	OECD 201 (EU C.3)	72
acetic acid	EC 50	300.82	Not specified	Method not given	72
peracetic acid		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
hydrogen peroxide	ErC 50	1.38	Skeletonema costatum	Method not given	72
acetic acid		No data available			
peracetic acid		No data available			

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
hydrogen peroxide	EC 50	466	Activated sludge	Method not given	
acetic acid	EC 10	1000	Pseudomonas putida	Method not given	0.5 hour(s)
peracetic acid		No data available			

Aquatic long-term toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
hydrogen peroxide	NOEC	4.3	Pimephales promelas	Method not given	96 hour(s)	
acetic acid		No data available				
peracetic acid	NOEC	0.00094	Brachydanio rerio	OECD 210	33 day(s)	_

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
hydrogen peroxide	NOEC	1	Daphnia pulex	Method not given	48 hour(s)	
acetic acid		No data available				
peracetic acid	NOEC	0.0121	Daphnia magna	Method not given	33 day(s)	

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
hydrogen peroxide		No data available				
acetic acid		No data available				
peracetic acid		No data available				

Terrestrial toxicity
Terrestrial toxicity - soil invertebrates, including earthworms, if available:

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Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
hydrogen peroxide		No data available				

Terrestrial toxicity - plants, if available:

remedial toxicity plants, il available:						
Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
hydrogen peroxide		No data available				

Terrestrial toxicity - birds. if available:

refrestrial toxicity birds, if available:						
Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
hydrogen peroxide		No data available				

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity beneficial insects, if available.						
Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
hydrogen peroxide		No data available				

Terrestrial toxicity - soil bacteria, if available:

Terrestrial toxicity - soil bacteria, il available.						
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/kg dw			time (days)	
		soil)				
hydrogen peroxide		No data				
	ĺ	available	l			

12.2 Persistence and degradability

Abiotic degradation
Abiotic degradation - photodegradation in air, if available:

- :	ibiotio dogidadatori priotodogidadatori iri dii, ir d	reac degradation priotedegradation in any in available.							
	Ingredient(s)	Half-life time	Method	Evaluation	Remark				
ſ	hydrogen peroxide	24 hour(s)	Method not given	OH radical					

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
hydrogen peroxide	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Туре	Half-life time	Method	Evaluation	Remark
hydrogen peroxide		No data available			

Biodegradation

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
hydrogen peroxide	Activated sludge, aerobe	Specific analysis (primary degradation)	> 50 % in < 1 day(s)		Not applicable (inorganic substance)
acetic acid	Activated sludge, aerobe		96% in 20 day(s)		Readily biodegradable
peracetic acid				Method not given	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

	Ingredient(s)	Medium & Type	Analytical method	DT 50	Method	Evaluation
Γ	hydrogen peroxide					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT 50	Method	Evaluation
hydrogen peroxide					No data available

12.3 Bioaccumulative potential

Ingredient(s)	Value	Method	Evaluation	Remark
hydrogen peroxide	-1.57		No bioaccumulation expected	
acetic acid	-0.17	Method not given	No bioaccumulation expected	
peracetic acid	No data available		Not relevant, does not	
			bioaccumulate	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
hydrogen peroxide	1.4		QSAR	Low potential for bioaccumulation	
acetic acid	3.16		Method not given	No bioaccumulation expected	
peracetic acid	No data available	-			

12.4 Mobility in soil

corntian to sail or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
hydrogen peroxide	2				Mobile in soil
acetic acid	No data available				Potential for mobility in soil, soluble in water
peracetic acid	No data available				Mobile in aqueous environment

12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

12.7 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods Waste from residues / unused

products:

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging

material is suitable for energy recovery or recycling in line with local legislation.

16 09 03* - peroxides, for example hydrogen peroxide. **European Waste Catalogue:**

Empty packaging

Dispose of observing national or local regulations. Recommendation:

Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information



Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number: 3149

14.2 UN proper shipping name:

Hydrogen peroxide and peroxyacetic acid mixture, stabilized

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 5.1(8)

14.4 Packing group: II 14.5 Environmental hazards:

Environmentally hazardous: Yes

Marine pollutant: Yes

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:

ADR

Classification code: OC1 Tunnel restriction code: (E) Hazard identification number: 58

IMO/IMDG

EmS: F-H, S-Q

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

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

- National regulations :
 Regulation (EC) 1907/2006 REACH (UK amended)
- Regulation (EC) 1272/2008 CLP (UK amended)
- Regulation (EC) 648/2004 Detergents regulation (UK amended)
- Biocidal Products Regulations 2001 (SI 2001/880)
- Control of Poisons and Explosives Precursors Regulations 2015
- Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Ingredients according to Detergents Regulation

oxygen-based bleaching agents

15 - 30 %

Comah - classification: P8 - OXIDISING LIQUIDS AND SOLIDS

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MSDS3648 Version: 07.0 Revision: 2022-12-22

Reason for revision:

Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 1, 4, 8, 16

Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Full text of the H and EUH phrases mentioned in section 3:

- H226 Flammable liquid and vapour.
- H242 Heating may cause a fire.
- H271 May cause fire or explosion; strong oxidiser.
- H302 Harmful if swallowed.
- · H312 Harmful in contact with skin.
- · H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- · H335 May cause respiratory irritation.

- 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.

Abbreviations and acronyms:

- AISE The international Association for Soaps, Detergents and Maintenance Products
 ATE Acute Toxicity Estimate
 DNEL Derived No Effect Limit
 EC50 effective concentration, 50%

- ERC Environmental release categories EUH CLP Specific hazard statement
- LC50 Lethal Concentration, 50% / Median Lethal Concentration

- LC50 Lethal Concentration, 50% / Median Lethal Concentration
 LC5 Life cycle stage
 LD50 Lethal Dose, 50% / Median Lethal dose
 NOAEL No observed adverse effect level
 NOEL No observed effect level
 OECD Organisation for Economic Cooperation and Development
 PBT Persistent, Bioaccumulative and Toxic
- PNEC Predicted No Effect Concentration
 PROC Process categories
- REACH number REACH registration number, without supplier specific part
 vPvB very Persistent and very Bioaccumulative

End of Safety Data Sheet