Safety Data Sheet

According to Regulation (EC) No 1907/2006

Divosan Plus VT53

Revision: 2024-11-19 **Version:** 11.1

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

1.1 Product identifier

Trade name: Divosan Plus VT53

UFI: UJM4-10MS-Q00C-Q5SN

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

Product use:	Cleaning in place chemical. Surface disinfectant. for food contact surface disinfection For industrial use only..
Uses advised against:	Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :
AISE_SWED_IS_1_1

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, De Corridor 4, 3621ZB Breukelen [Maarssenbroeksedijk 2, 3542DN Utrecht], The Netherlands

Contact details
Tandur Hf.
Hesthálsi 12, 110 Reykjavík
Tel. 5101200, Email: tandur@tandur.is

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible).
Poison Center: (+354) 543-2222
Emergency services: 112.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Oxidising liquids, Category 2 (H272)
Skin corrosion, Category 1B (H314)
Acute toxicity - Oral, Category 4 (H302)
Acute toxicity - Dermal, Category 4 (H312)
Acute toxicity - Inhalation, Category 4 (H332)
Specific target organ toxicity - Single exposure, Category 3 (H335)
Chronic aquatic toxicity, Category 1 (H410)
Corrosive to metals, Category 1 (H290)

2.2 Label elements

Signal word: Danger.

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

Hazard statements:
H272 - May intensify fire; oxidiser.
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.
H290 - May be corrosive to metals.

Precautionary statements:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220 - Keep away from clothing and other combustible materials.
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
acetic acid	200-580-7	64-19-7	01-2119475328-30	Flammable liquids, Category 3 (H226) Skin corrosion, Category 1A (H314)		10-20
Hydrogen peroxide	231-765-0	7722-84-1	[6]	Oxidising liquids, Category 1 (H271) Skin corrosion, Category 1A (H314) Acute toxicity - Oral, Category 4 (H302) Acute toxicity - Inhalation, Category 4 (H332) Specific target organ toxicity - Single exposure, Category 3 (H335) Chronic aquatic toxicity, Category 3 (H412)		10-20
Peracetic acid	201-186-8	79-21-0	[6]	Organic peroxides, Type D (H242) Flammable liquids, Category 3 (H226) Skin corrosion, Category 1A (H314) Acute toxicity - Oral, Category 4 (H302) Acute toxicity - Inhalation, Category 4 (H332) Specific target organ toxicity - Single exposure, Category 3 (H335) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 1 M=10 (H410)		3-10

Specific concentration limits
acetic acid:
• Serious eye damage, Category 1 (H318) >= 25% > Eye irritation, Category 2 (H319) >= 10%
• Skin corrosion, Category 1A (H314) >= 90% > Skin corrosion, Category 1B (H314) >= 25% > Skin irritation, Category 2 (H315) >= 10%
Hydrogen peroxide:
• Serious eye damage, Category 1 (H318) >= 8% > Eye irritation, Category 2 (H319) >= 5%
• Skin corrosion, Category 1A (H314) >= 70% > Skin corrosion, Category 1A (H314) >= 60% > Skin corrosion, Category 1B (H314) >= 50% > Skin irritation, Category 2 (H315) >= 35%
• Specific target organ toxicity - Single exposure, Category 3 (H335) >= 35%
Peracetic acid:
• Specific target organ toxicity - Single exposure, Category 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.

Inhalation: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTRE, doctor or physician.

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

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.

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.

Advice 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 advised 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 eat, drink or smoke when using this product. Use only with adequate ventilation. 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 30 °C.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

Seveso - Lower Tier requirements (tonnes): 50
Seveso - 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)	Long term value(s)	Short term value(s)
acetic acid	10 ppm 25 mg/m³	20 ppm 50 mg/m³
Hydrogen peroxide	1 ppm 1.4 mg/m³	

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
acetic acid	-	-	-	-
Hydrogen peroxide	-	-	-	-
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)
acetic acid	-	-	-	-
Hydrogen peroxide	-	-	-	-
Peracetic acid	0.12 %	-	-	-

DNEL/DMEL dermal 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)
acetic acid	-	-	-	-
Hydrogen peroxide	-	-	-	-
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
acetic acid	25	-	25	-
Hydrogen peroxide	3	-	1.4	-
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
acetic acid	25	-	25	-
Hydrogen peroxide	1.93	-	0.21	-
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)
acetic acid	3.058	0.3058	30.58	85
Hydrogen peroxide	0.0126	0.0126	0.0138	4.66
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)
acetic acid	11.36	1.136	0.47	-
Hydrogen peroxide	0.047	0.047	0.0023	-
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 undiluted 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

Personal protective equipment
Eye / face protection: Safety glasses or goggles (EN 16321 / 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: No special requirements under normal use conditions. Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).
Respiratory protection: Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or aerosols should be avoided.

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): 5

Appropriate engineering controls: No special requirements under normal use conditions.
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 closed system	AISE_SWED_IS_1_1	IS	PROC 1	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 Acidic
Odour threshold: Not applicable
Melting point/freezing point (°C): -24 — N.A.
Initial boiling point and boiling range (°C): Not determined 105 — See substance data

Substance data, boiling point

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

	Method / remark
Flammability (solid, gas): Not applicable to liquids	
Flammability (liquid): Not flammable.	
Flash point (°C): ≈ 84 °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	N.A
Decomposition temperature: ≥ 60 (°C) SADT (self-accelerating decomposition temperature)	
pH: < 2 (neat)	ISO 4316
Dilution pH: ≈ 3 (5 %)	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)
acetic acid	Soluble	Method not given	
Hydrogen peroxide	1000	Method not given	20
Peracetic acid	No data available		

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

	Method / remark
Vapour pressure: See substance data.	See substance data

Substance data, vapour pressure

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

	Method / remark
Relative density: ≈ 1.09 (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.	N.A
Oxidising properties: May intensify fire; oxidiser.	Weight of evidence
Corrosion to metals: Corrosive	

9.2.2 Other safety characteristics

No 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.

10.6 Hazardous decomposition products
Oxygen.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Mixture data: .

LD50 Oral 1100-1922 **Species** Rat **Method** Weight of evidence
LD50 Dermal ≥ 1147 **Species** Rabbit **Method** Weight of evidence
LC50 (Dust/Mist) 2.9-4 **Species** Rat **Method** Weight of evidence

Relevant calculated ATE(s):
ATE - Oral (mg/kg): >2000

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

Acute toxicity
Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Oral (mg/kg)
acetic acid	LD_{50}	3310	Rat	Weight of evidence		3310
Hydrogen peroxide	LD_{50}	> 300-2000	Rat	Weight of evidence		3400
Peracetic acid	LD_{50}	> 50-2000	Rat	Substance was tested as 5 % aqueous solution OECD 401 (EU B.1)		9600

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Dermal (mg/kg)
acetic acid		No data available				Not established
Hydrogen peroxide	LD_{50}	> 2000	Rabbit	Substance was tested as 35 % aqueous solution		Not established
Peracetic acid	LD_{50}	50-2000	Rabbit	EPA OPP 81-2 Substance was tested as 5 % aqueous solution		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
acetic acid	LC_{50}	> 40	Rat	Weight of evidence	4
Hydrogen peroxide	LC_{0}	No mortality observed (vapour)	Rat	Method not given	4
Peracetic acid	LC_{50}	> 0.05-0.5 (dust) (mist)	Rat	EPA OPP 81-3 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)
acetic acid	Not established	Not established	Not established	Not established
Hydrogen peroxide	Not established	Not established	11	Not established
Peracetic acid	Not established	Not established	11	Not established

Irritation and corrosivity
Skin irritation and corrosivity

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

Eye irritation and corrosivity

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

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
acetic acid	No data available			
Hydrogen peroxide	Irritating to respiratory tract		Method not given	
Peracetic acid	Irritating to respiratory tract	Rat	Method not given	

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
acetic acid	Not sensitising		Method not given	
Hydrogen peroxide	Not sensitising	Guinea pig	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
acetic acid	No data available			
Hydrogen peroxide	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)
acetic acid	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
Hydrogen peroxide	No evidence for mutagenicity	OECD 471 (EU B.12/13)	No evidence of genotoxicity, negative test results	Method not given
Peracetic acid	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No evidence for mutagenicity, negative test results	Method not given

Carcinogenicity

Ingredient(s)	Effect
acetic acid	No evidence for carcinogenicity, negative test results
Hydrogen peroxide	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
acetic acid			No data available				No evidence for reproductive toxicity
Hydrogen peroxide			No data available				No evidence for reproductive 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
acetic acid		No data available				
Hydrogen peroxide	NOAEL	100	Mouse	OECD 408 (EU B.26)	90	
Peracetic acid	NOAEL	23.4	Rat	Weight of evidence	90	No adverse effects observed

Sub-chronic dermal toxicity

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

STOT-single exposure

Ingredient(s)	Affected organ(s)
acetic acid	No data available
Hydrogen peroxide	No data available
Peracetic acid	Not applicable

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
acetic acid	No data available
Hydrogen peroxide	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)
acetic acid	LC_{50}	75	*Lepomis macrochirus*	Method not given	96
Hydrogen peroxide	LC_{50}	16.4	*Pimephales promelas*	EPA-OPPTS 850.1075	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)
acetic acid	EC_{50}	95	*Daphnia magna Straus*	Method not given	24
Hydrogen peroxide	EC_{50}	2.4	*Daphnia pulex*	Method not given	48

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)
acetic acid	EC_{50}	300.82	*Not specified*	Method not given	72
Hydrogen peroxide	EC_{50}	1.38	*Skeletonema costatum (marine)*	OECD 201 (EU C.3)	72
Peracetic acid		No data available			available EC50 values seem to be product level (5% + 20% H2O2)

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
acetic acid		No data available			
Hydrogen peroxide	ErC_{50}	1.38	*Skeletonema costatum*	Method not given	72
Peracetic acid		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
acetic acid	EC_{10}	1000	*Pseudomonas putida*	Method not given	0.5 hour(s)
Hydrogen peroxide	EC_{50}	466	*Activated sludge*	Method not given	
Peracetic acid		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
acetic acid		No data available				
Hydrogen peroxide	NOEC	4.3	*Pimephales promelas*	Method not given	96 hour(s)	
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
acetic acid		No data available				
Hydrogen peroxide	NOEC	0.63	*Daphnia magna*	Method not given	21 day(s)	
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
acetic acid		No data available				
Hydrogen peroxide		No data available				
Peracetic acid		No data available				

Terrestrial toxicity

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

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:

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:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
Hydrogen peroxide		No data 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:

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

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
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)	Type	Half-life time	Method	Evaluation	Remark
Hydrogen peroxide		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
acetic acid	Activated sludge, aerobe		96% in 20 day(s)		Readily biodegradable
Hydrogen peroxide	Activated sludge, aerobe	Specific analysis (primary degradation)	> 50 % in < 1 day(s)		Not applicable (inorganic substance)
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
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

Partition coefficient n-octanol/water (log Kow)

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

Bioconcentration factor (BCF)

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

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

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

Empty packaging

Recommendation: Dispose of observing national or local regulations.

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 or ID number: 3149

14.2 UN proper shipping name:

Hydrogen peroxide and peroxyacetic acid mixture, stabilized

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 Maritime transport in bulk according to IMO instruments: 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

EU regulations:
• Regulation (EC) No. 1907/2006 - REACH
• Regulation (EC) No 1272/2008 - CLP
• Regulation (EC) No. 648/2004 - Detergents regulation
• Regulation (EU) No 528/2012 on biocidal products
• Regulation (EU) 2019/1148 - Explosive Precursors
• substances identified as having endocrine disrupting properties in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605
• 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 EC Detergents Regulation 648/2004
oxygen-based bleaching agents 15 - 30 %

Seveso - 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

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Reason for revision:
This data sheet contains changes from the previous version in section(s):, 7, 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.

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
• LCS - 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
• H226 - Flammable liquid and vapour.
• H242 - Heating may cause a fire.
• H271 - May cause fire or explosion; strong oxidiser.
• H302 - Harmful if swallowed.
• H314 - Causes severe skin burns and 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.
- H318 - Causes serious eye damage.

End of Safety Data Sheet