

# Safety Data Sheet

According to Regulation (EC) No 1907/2006

# Deosan Activ AG317

Revision: 2018-03-25

Version: 02.2

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

#### 1.1 Product identifier

Trade name: Deosan Activ AG317

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

Identified uses: For professional and industrial use only. Disinfectant for closed processing systems (AISE\_CS\_I02 & AISE\_CS\_I04) Uses advised against: Uses other than those identified are not recommended

#### 1.3 Details of the supplier of the safety data sheet Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

#### Contact details

**Diversey Hygiene Sales Limited** Jamestown Road, Finglas, Dublin 11, Ireland Tel: 01 8081808 (9am - 5pm Mon-Fri) Email: dublin.orders@diversey.com

#### 1.4 Emergency telephone number

Tel: 01 8081808 (9am - 5pm Mon-Fri) After hours: National Poisons Centre, Beaumont Hospital, Dublin 9 Tel: 01 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week) Tel: 01 809 2566 (health care professionals)

# 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) Aquatic Chronic 1 (H410) Met. Corr. 1 (H290)

#### 2.2 Label elements



Signal word: Danger.

Contains hydrogen peroxide (Hydrogen Peroxide), peracetic acid (Peracetic Acid), acetic acid (Acetic 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.
- H335 May cause respiratory irritation.
- H410 Very toxic to aquatic life with long lasting effects.
- H290 May be corrosive to metals.

#### **Precautionary statements:**

- P210 Keep away from heat.
- 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

No other hazards known

The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII

## 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	01-2119485845-22	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	No data available	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 (H410)		3-10

\* Polymer.

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

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

[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included

for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.

[2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.
 [3] Exempted: Annex V of Regulation (EC) No 1907/2006.

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

### 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 breathing is irregular or stopped, administer artificial respiration.
Inhalation:	Call a POISON CENTRE, doctor or physician.
Skin contact:	Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Take off immediately all contaminated clothing and wash it before re-use. Immediately call a POISON CENTRE, doctor or physician.
Eye contact:	Immediately rinse eyes cautiously with lukewarm water for several 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. 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:	May cause respiratory irritation.
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, gloves and eye/face protection.

#### 6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Dilute with plenty of water. 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

Absorb onto dry sand or similar inert material. Do not use fabric, sawdust, paper or other inflammable materials (danger of spontaneous combustion). Ensure adequate ventilation.

#### 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:** No special precautions required.

no special precautions required.

#### 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 hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Do not breathe vapours. Use only with adequate ventilation.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Keep only in original packaging. Store in a closed container. Store in a well-ventilated place. Keep cool. 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.

#### 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)
hydrogen peroxide	1 ppm	2 ppm
	1.5 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>
acetic acid	10 ppm	15 ppm
	25 mg/m <sup>3</sup>	37 mg/m <sup>3</sup>

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 oral exposure - Consumer (mg/kg bw)

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

#### DNEL 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 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)
hydrogen peroxide	-	-	-	-
acetic acid	-	-	-	-
peracetic acid	0.12 %	-	-	-

#### DNEL inhalatory exposure - Worker (mg/m<sup>3</sup>)

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 inhalatory exposure - Consumer (mg/m<sup>3</sup>)

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: Covering activities such as filling and transfer of product to application equipment, flasks or buckets

Appropriate engineering controls: Appropriate organisational 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. Avoid direct contact and/or splashes where possible. Train personnel.
Personal protective equipment Eye / face protection: Hand 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. 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:	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 (%): 4				
Appropriate engineering controls: Appropriate organisational controls:	No special requirements under normal use conditions. Avoid direct contact and/or splashes where possible. Train personnel.			
Personal protective equipment Eye / face protection: Hand protection: Body protection: Respiratory protection:	No special requirements under normal use conditions. No special requirements under normal use conditions. No special requirements under normal use conditions. No special requirements under normal use conditions.			
Environmental exposure controls:	No special requirements under normal use conditions.			

# **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
pH: < 2 (neat)</li>
Melting point/freezing point (°C): Not determined
Initial boiling point and boiling range (°C): Not determined

Not relevant to classification of this product

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		

Flash point (°C): 74-83 Sustained combustion: Not applicable. (UN Manual of Tests and Criteria, section 32, L.2) Evaporation rate: Not determined Flammability (solid, gas): Not determined Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

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

Method / remark

Method / remark

Method / remark

closed cup

Vapour pressure: Not determined 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		

#### Vapour density: Not determined Relative density: ≈ 1.11 (20 °C) 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

 Autoignition temperature: Not determined

 Decomposition temperature: > 60 (°C) SADT (self-accelerating decomposition temperature)

 Viscosity: Not determined

 Explosive properties: Not explosive.

 Oxidising properties: May intensify fire; oxidiser.

### 9.2 Other information

Surface tension (N/m): Not determined Corrosion to metals: Corrosive

Weight of evidence

Not relevant to classification of this product Weight of evidence

Substance data, dissociation constant, if 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

To avoid thermal decomposition, do not overheat.

#### 10.5 Incompatible materials

Take any precaution to avoid mixing with combustibles. Reacts with alkali and metals. 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 toxicological effects

No data is available on the mixture.

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

#### Acute toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
hydrogen peroxide	LD 50	431-500	Rat	Substance was tested as 35 % aqueous solution Method not given	
acetic acid	LD 50	3310	Rat	Method not given	
peracetic acid	LD 50	315	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
hydrogen peroxide	LD 50	> 2000	Rabbit	Substance was tested as 35 % aqueous solution	
acetic acid		> 2000			
peracetic acid		No data available	Rabbit		

Acute inhalative toxicity

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

# 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

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				
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	Method not given	

#### 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
	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
	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	Species	Method	Exposure	Remarks and other effects
			(mg/kg bw/d)			time	reported
hydrogen peroxide			No data				No evidence for reproductive
			available				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	Species	Method	Exposure	Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
hydrogen peroxide	NOAEL	100	Mouse	Method not	90	
				given		
acetic acid		No data				
		available				
peracetic acid	NOAEL	1800	Rat	Method not	14	
				given		

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	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	No data	Mouse	Method not	28	
		available		given		
acetic acid		No data				
		available				
peracetic acid		No data				
		available				

#### Chronic toxicity

Ingredient(s)	Exposure	Endpoint	Value	Species	Method	Exposure	Specific effects and	Remark
	route		(mg/kg bw/d)			time	organs affected	
hydrogen peroxide			No data					
, , , ,			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	No data available

#### STOT-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. If relevant, see section 9 for dynamic viscosity and relative density of the product.

#### Potential adverse health effects and symptoms

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

# 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	Method not given	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	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	2.5	Chlorella	OECD 201 (EU C.3)	72

			vulgaris		
acetic acid	EC 50	300.82	Not specified	Method not given	72
peracetic acid		No data available			-

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
hydrogen peroxide		No data			-
		available			
acetic acid		No data			-
		available			
peracetic acid		No data			-
·		available			

Impact on sewage plants - toxicity to bacteria					
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 Aquatic long-term toxicity - fish

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		No data available				

#### 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		No data available				

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:

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

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
hydrogen peroxide		No data			-	
		available				
acetic acid		No data			-	
		available				
peracetic acid		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			-	
acetic acid		No data available			-	
peracetic acid		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			-	
acetic acid		No data available			-	
peracetic acid		No data available			-	

# 12.2 Persistence and degradability

#### Abiotic degradation photodegradation in air, if available; Abiotic dears lation

ribiolie degradation photodegradation in all, i a	valiable.			
Ingredient(s)	Half-life time	Method	Evaluation	Remark
hydrogen peroxide	24 hour(s)	Method not given	OH radical	

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

#### Biodegradation .....

Ready biodegradability - aerobic conditions					
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			95 % in 5 day(s)	OECD 301D	Readily biodegradable
peracetic acid				Method not given	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

# **12.3 Bioaccumulative potential** Partition coefficient n-octanol/water (log Kow)

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)

Dioconcentration lactor	501)				
Ingredient(s)	Value	Species	Method	Evaluation	Remark
hydrogen peroxide	No data available				
acetic acid	3.16		Method not given	No bioaccumulation expected	
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
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
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#### 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 Other adverse effects

No other adverse effects known.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods Waste from residues / unused products:

European Waste Catalogue:

Empty packaging Recommendation: Suitable cleaning agents: 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.

Dispose of observing national or local regulations. 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: ||
- 14.5 Environmental hazards:

Environmentally hazardous: Yes Marine pollutant: Yes

- 14.6 Special precautions for user:
- Control temperature: Not applicable.
- 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

#### EU regulations:

- Regulation (EU) No 528/2012 on biocidal products
- Regulation (EC) No 1272/2008 CLP

• Regulation (EC) No. 1907/2006 - REACH

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

#### 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: MSDS6683

#### Version: 02.2

Revision: 2018-03-25

#### Reason for revision:

This data sheet contains changes from the previous version in section(s):, 9, 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.
  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
- DNEL Derived No Effect Limit
- EUH CLP Specific hazard statement
- PBT Persistent, Bioaccumulative and Toxic
- PNEC Predicted No Effect Concentration
- REACH number REACH registration number, without supplier specific part
- VPvB very Persistent and very Bioaccumulative
   ATE Acute Toxicity Estimate

End of Safety Data Sheet