

## Divosan Mezzo VT7

Revision: 2012-09-17

Version 04

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

#### 1.1 Product identifier

Trade name: Divosan Mezzo VT7

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

##### Identified uses:

For industrial use only.

AISE-P801 - Food process cleaner. Cleaning In place (CIP) process

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 Ltd

##### Contact details

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: MSDSinfoUK@sealedair.com

#### 1.4 Emergency telephone number

For medical or environmental emergency only:

call 0800 052 0185

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

The product has been classified and labelled in accordance with Directive 1999/45/EC and corresponding national legislation.

##### Indication of danger

C - Corrosive

O - Oxidising

##### Risk phrases:

R 8 - Contact with combustible material may cause fire.

R22 - Harmful if swallowed.

R35 - Causes severe burns.

R37 - Irritating to respiratory system.

#### 2.2 Label elements



C - Corrosive

O - Oxidising

Contains hydrogen peroxide, nitric acid, peracetic acid

##### Risk phrases:

R 8 - Contact with combustible material may cause fire.

R22 - Harmful if swallowed.

R35 - Causes severe burns.

R37 - Irritating to respiratory system.

##### Safety phrases:

S141 - Keep away from impurities, decomposition catalysts, alkalis, reducing agents and flammable substances.

S23c - Do not breathe vapour.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28a - After contact with skin, wash immediately with plenty of water.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 3/7 - Keep container tightly closed in a cool place.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

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**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	Classification (EC) 1272/2008	Notes	Weight percent
hydrogen peroxide	231-765-0	7722-84-1	01-2119485845-22	C,O; R5-8-20/22-35	Ox. Liq. 1 (H271) Skin Corr. 1A (H314) Acute Tox. 4 (H302) Acute Tox. 4 (H332) STOT SE 3 (H335)		10-20
nitric acid	231-714-2	7697-37-2	01-2119487297-23	C,O; R8-35	Skin Corr. 1A (H314) Met. Corr. 1 (H290) Ox. Liq. 3 (H272) (EUH071)		3-10
acetic acid	200-580-7	64-19-7	01-2119475328-30	C; R10-35	Skin Corr. 1A (H314) Flam. Liq. 3 (H226)		3-10
peracetic acid	201-186-8	79-21-0	No data available	C,O,N; R7-10-20/21/22-35-50	Org. Perox. D (H242) Flam. Liq. 3 (H226) Skin Corr. 1A (H314) Aquatic Acute 1 (H400) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332)		1-3

\* Polymer.

For the full text of the R, 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 unconscious place in recovery position and seek medical advice.

**Inhalation**

Remove from source of exposure. Get medical attention immediately.

**Skin contact**

Take off all contaminated clothing immediately. Immediately wash off with plenty of water. Get medical attention.

**Eye contact**

Wash off immediately with plenty of water. Get medical attention immediately.

**Ingestion**

Remove material from mouth. Immediately drink 1-2 glasses of water or milk. Get medical attention immediately.

**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**

Severe irritant, may cause respiratory tract irritation.

**Skin contact**

Causes severe burns. Powerful oxidizing agent.

**Eye contact**

Causes severe or permanent damage.

**Ingestion**

Harmful. Causes severe burns. Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

**Sensitisation**

No known effects.

**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**

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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. Dilute with plenty of water.

### 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

#### Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Do not mix with other products unless advised by Diversey. Use only with adequate ventilation. For advice on general occupational hygiene see subsection 8.2. For environmental exposure controls see subsection 8.2. For incompatible materials see subsection 10.5.

#### Prevention of fire and explosion

No special precautions required.

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

#### Requirements for storage rooms / facilities:

In accordance with local and national regulations.

#### Combined storage in storage rooms / facilities:

In accordance with local and national regulations. Store away from products containing chlorine-based bleaching agents or sulphites.

#### Basic storage conditions

Store in original container. Keep container tightly closed. For conditions to avoid see subsection 10.4.

### 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 <sup>3</sup>	2 ppm 2.8 mg/m <sup>3</sup>
nitric acid		1 ppm 2.6 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)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
hydrogen peroxide	No data available	No data available	No data available	No data available
nitric acid	No data available	No data available	No data available	No data available
acetic acid	No data available	No data available	No data available	No data available
peracetic acid	No data available	No data available	No data available	No data available

DNEL dermal exposure - Worker

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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	No data available	No data available	No data available	No data available
nitric acid	No data available	No data available	No data available	No data available
acetic acid	No data available	No data available	No data available	No data available
peracetic acid	No data available	No data available	No data available	No data available

## 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	No data available	No data available	No data available	No data available
nitric acid	No data available	No data available	No data available	No data available
acetic acid	No data available	No data available	No data available	No data available
peracetic acid	No data available	No data available	No data available	No data available

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	No data available	1.4	No data available
nitric acid	2.6	No data available	1.3	No data available
acetic acid	No data available	No data available	No data available	No data available
peracetic acid	No data available	No data available	No data available	No data available

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	No data available	0.21	No data available
nitric acid	1.3	No data available	0.65	No data available
acetic acid	No data available	No data available	No data available	No data available
peracetic acid	No data available	No data available	No data available	No data available

## 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
nitric acid	No data available	No data available	No data available	No data available
acetic acid	No data available	No data available	No data available	No data available
peracetic acid	No data available	No data available	No data available	No data available

## Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m <sup>3</sup> )
hydrogen peroxide	0.047	0.047	0.0023	No data available
nitric acid	No data available	No data available	No data available	No data available
acetic acid	No data available	No data available	No data available	No data available
peracetic acid	No data available	No data available	No data available	No data available

## 8.2 Exposure controls

## General health and safety measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Take off immediately all contaminated clothing. Wash hands before breaks and at the end of workday. Do not breathe gases, vapour, spray or aerosols. Avoid contact with skin and eyes.

*The following information applies for the uses indicated in subsection 1.2.*

*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.

## Personal protective equipment

**Eye / face protection:** Safety glasses or goggles (EN 166).

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<b>Hand protection:</b>	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: $\geq 480$ min Material thickness: $\geq 0.7$ mm  Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: $\geq 30$ min Material thickness: $\geq 0.4$ mm  In consultation with the supplier of protective gloves a different type providing similar protection may be chosen
<b>Body protection:</b>	Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur.
<b>Respiratory protection:</b>	Respiratory protection is not normally required However, inhalation of vapour, spray, gas or aerosols should be avoided
<b>Environmental exposure controls:</b>	Should not reach sewage water or drainage ditch undiluted or unneutralised.

*Recommended safety measures for handling the diluted product:*

**Recommended maximum concentration (%):** 8

<b>Appropriate engineering controls:</b>	The product is intended to be used in closed systems.
<b>Appropriate organisational controls:</b>	Avoid direct contact and/or splashes where possible. Train personnel.

**Personal protective equipment .**

<b>Eye / face protection:</b>	No special requirements under normal use conditions.
<b>Hand protection:</b>	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: $\geq 480$ min Material thickness: $\geq 0.7$ mm  Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: $\geq 30$ min Material thickness: $\geq 0.4$ mm  In consultation with the supplier of protective gloves a different type providing similar protection may be chosen
<b>Body protection:</b>	No special requirements under normal use conditions.
<b>Respiratory protection:</b>	If the product is applied in a closed system, as recommended, no respiratory protection equipment will be required
<b>Environmental exposure controls:</b>	No special requirements under normal use conditions.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Physical State:</b>	Liquid
<b>Colour</b>	Clear Colourless
<b>Odour</b>	Product specific
<b>pH:</b>	$\leq 2$ (neat)
<b>Boiling point/range (°C):</b>	Not determined
<b>Flash point (°C):</b>	Not applicable.
<b>Flammability</b>	Not flammable.
<b>Specific gravity:</b>	1.14 g/cm <sup>3</sup> (20°C)
<b>Solubility in / Miscibility with</b>	<b>Water:</b> Fully miscible
<b>Explosive properties</b>	Not explosive.
<b>Oxidising properties:</b>	Contact with combustible material may cause fire.

### 9.2 Other information

No other relevant information available

## SECTION 10: Stability and reactivity

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**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**

Keep away from heat and direct sunlight. Keep in a cool place.

**10.5 Incompatible materials**

Contact with combustible material may cause fire. Keep away from impurities, decomposition catalysts, alkalis, reducing agents and flammable substances. 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****Mixtures**

No test data is available on the mixture

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)
hydrogen peroxide	LD <sub>50</sub>	> 693.7	Rat	Method not given	
nitric acid		No data available			
acetic acid	LD <sub>50</sub>	3310	Rat	Method not given	
peracetic acid	LD <sub>50</sub>	315	Rat	Method not given	

## Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
hydrogen peroxide	LD <sub>50</sub>	> 2000	Rabbit	Method not given	
nitric acid		No data available			
acetic acid	LD <sub>50</sub>	1060	Rabbit	Method not given	
peracetic acid		No data available			

## Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
hydrogen peroxide	LC <sub>50</sub>	> 0.17	Rat	Method not given	4
nitric acid	LC <sub>50</sub>	1562.5	Rat	OECD 403 (EU B.2)	
acetic acid	LC <sub>50</sub>	40	Rat	Method not given	4
peracetic acid	LC <sub>50</sub>	0.59	Rat	OECD 403 (EU B.2)	1

**Irritation and corrosivity**

## Skin irritation and corrosivity

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

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peracetic acid	Corrosive	Rabbit	Method not given	
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## Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
hydrogen peroxide	Irritating to respiratory tract		Method not given	
nitric acid	No data available			
acetic acid	No data available			
peracetic acid	No data available			

## Sensitisation

## Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
hydrogen peroxide	Not sensitising	Guinea pig	Method not given	
nitric acid	No data available			
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			
nitric acid	No data available			
acetic acid	No data available			
peracetic acid	No data available			

## 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	Method not given	90	
nitric acid	NOAEL	1500	Rat	OECD 422, oral	28	
acetic acid		No data available				
peracetic acid		No data available				

## Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
hydrogen peroxide		No data available				
nitric acid		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 available	Mouse	Method not given	28	
nitric acid		No data available				
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			No data available					
nitric acid			No data available					
acetic acid			No data available					
peracetic acid			No data available					

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**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Mixture data:

Based on available data, the classification criteria are not met.

Substance data, where relevant and available

## Carcinogenicity

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

## Mutagenicity

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

## 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
nitric acid	NOAEL	Developmental toxicity	1500	Rat	OECD 422, oral		Not toxic for reproduction
acetic acid			No data available				No evidence for reproductive toxicity
peracetic acid	NOAEL		200	Rat	Not known		

**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**

Mixtures

No test 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 <sub>50</sub>	16.4	Pimephales promelas	Method not given	96
nitric acid	LC <sub>50</sub>	72	Gambusia affinis	Method not given	96
acetic acid	LC <sub>50</sub>	75	Lepomis macrochirus	Method not given	96
peracetic acid	LC <sub>50</sub>	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 <sub>50</sub>	2.4	Daphnia pulex	Method not given	48
nitric acid	EC <sub>50</sub>	8609	Daphnia magna Straus	Non guideline test	24
acetic acid	EC <sub>50</sub>	95	Daphnia magna Straus	Method not given	24
peracetic acid	EC <sub>50</sub>	3.3	Daphnia magna Straus	OECD 202	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
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hydrogen peroxide	EC <sub>50</sub>	27.5 - 43	Scenedesmus quadricauda	Method not given	240
nitric acid		No data available			
acetic acid		No data available			
peracetic acid		No data available			

## Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
hydrogen peroxide		No data available			
nitric acid		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 <sub>50</sub>	466	Activated sludge	Method not given	
nitric acid		No data available			
acetic acid	EC <sub>10</sub>	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		
nitric acid	LD <sub>50</sub>	8226	Oncorhynchus mykiss	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		
nitric acid		No data available				
acetic acid		No data available				
peracetic acid		No data available				

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

## Terrestrial toxicity

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

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if 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:

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Abiotic degradation - other processes, if available:

**Biodegradation**

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT <sub>50</sub>	Method	Evaluation
hydrogen peroxide	Activated sludge, aerobe	Specific analysis (primary degradation)	> 50% in < 2 min%	Method not given	Readily biodegradable
nitric acid					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	
nitric acid	No data available		Not relevant, does not bioaccumulate	
acetic acid	No data available		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	No data available				
nitric acid	No data available				
acetic acid	No data available				
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
nitric acid	No data available				Mobile in aqueous environment
acetic acid	No data available				
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 Other adverse effects**

No other adverse effects known.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

**Waste from residues / unused products** Dispose of in compliance with all Federal, state, provincial, and local laws and regulations.  
**European Waste Catalogue:** 16 09 03\* - peroxides, for example hydrogen peroxide.

**Empty packaging****Recommendation:****Suitable cleaning agents**

Dispose of observing national or local regulations.

Water, if necessary with cleaning agent.

**SECTION 14: Transport information**

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**ADR, RID, ADN, IMO/IMDG, ICAO/IATA****14.1 UN number:** 3149**14.2 UN proper shipping name:**

Hydrogen peroxide and peroxyacetic acid mixture, stabilized

**14.3 Transport hazard class(es):****Class:**5.1**Label(s):**5.1+8**14.4 Packing group:** II**14.5 Environmental hazards:****Environmentally hazardous:**No**Marine pollutant** No**14.6 Special precautions for user:** None known.**14.7 Transport in bulk according to Annex II of MARPOL 73/78 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****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*

**MSDS code:** MSDS3822**Version** 04**Revision:** 2012-09-17**Reason for revision:**

Overall design adjusted in accordance with Regulation (EC) No 1907/2006, Annex II

**Full text of the R, H and EUH phrases mentioned in section 3**

- R35 - Causes severe burns.
- R 8 - Contact with combustible material may cause fire.
- R 5 - Heating may cause an explosion.
- R10 - Flammable.
- R50 - Very toxic to aquatic organisms.
- R 7 - May cause fire.
- R22 - Harmful if swallowed.
- R37 - Irritating to respiratory system.
- R20/22 - Harmful by inhalation and if swallowed.
- R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.
- H226 - Flammable liquid and vapour.
- H242 - Heating may cause a fire.
- H271 - May cause fire or explosion; strong oxidiser.
- H272 - May intensify fire; 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.

**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

**Divosan Mezzo VT7**

**End of Safety Data Sheet**