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

1.1 Product identifier

- Trade name: PROXITANE SANITISER, PROXITANE AG SANITISER
- Synonyms: Peracetic acid, Peroxyethanoïc acid, PAA
- Formula: CH3-COOOH

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

Uses of the Substance/Mixture

- Cleaning agent
- Disinfectants and general biocidal products
- Oxidizing agents

1.3 Details of the supplier of the safety data sheet

Company

Solvay Interox Pty Ltd
20-22 McPherson St
NSW 2019 Banksmeadow
AUSTRALIA
Phone: +61 02 9316 8000
Fax: +61 02 9316 6445

E-mail address

manager.sds@solvay.com

1.4 Emergency telephone number

+61 2 8014 4558 [CareChem 24]

MULTI LINGUAL EMERGENCY NUMBER (24/7)

Europe/Latin America/Africa:+44 1235 239 670 (UK)

Middle East/Africa speaking Arabic: +44 1235 239 671 (UK)

Asia Pacific : +65 3158 1074 (Singapore)

China : 400 120 6011 (toll-free, access from China only)

North America : +1 800 424 9300

Poisons information

- "For advice, contact a Poison Information Center (e.g. phone Australia 13 1126) or a doctor (at once)"

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Work Health and Safety Regulation 2011

- Flammable liquids , Category 4	H227: Combustible liquid.
- Oxidizing liquids , Category 2	H272: May intensify fire; oxidizer.
- Corrosive to metals , Category 1	H290: May be corrosive to metals.
- Acute toxicity , Category 4	H302: Harmful if swallowed.
- Acute toxicity , Category 4	H332: Harmful if inhaled.
- Acute toxicity , Category 4	H312: Harmful in contact with skin.
- Skin corrosion , Sub-category 1B	H314: Causes severe skin burns and eye damage.
- Serious eye damage , Category 1	H318: Causes serious eye damage.
- Specific target organ toxicity - single exposure, Category 3	H335: May cause respiratory irritation. (Respiratory system),

SUSMP (AU)

- Schedule 6: Poison

Please use the original publication to check for specific uses, specific conditions or threshold limits that might apply for this chemical.

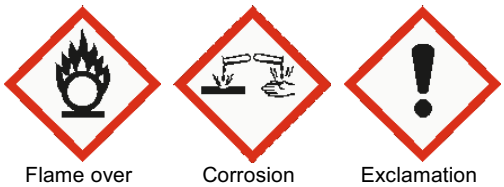
2.2 Label elements

Work Health and Safety Regulation 2011

Hazardous products which must be listed on the label

- CAS-No. 7722-84-1 hydrogen peroxide
- CAS-No. 79-21-0 peracetic acid

Pictogram



Flame over circle | Corrosion | Exclamation mark

Signal word

- Danger

Hazard statements

- H227	Combustible liquid.
- H272	May intensify fire; oxidizer.
- H290	May be corrosive to metals.
- H302 + H312 + H332	Harmful if swallowed, in contact with skin or if inhaled.
- H314	Causes severe skin burns and eye damage.
- H335	May cause respiratory irritation.

Precautionary statements

Prevention

- 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.
- P234	Keep only in original packaging.
- P261	Avoid breathing mist or vapours.
- P264	Wash skin thoroughly after handling.
- P270	Do not eat, drink or smoke when using this product.
- P271	Use only outdoors or in a well-ventilated area.
- P280	Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

Response

- P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
- P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
- P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
- P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
- P362 + P364	Take off contaminated clothing and wash it before reuse.
- P390	Absorb spillage to prevent material damage.
- P370 + P378	In case of fire: Use water spray to extinguish.

Storage

- P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
- P405	Store locked up.
- P406	Store in a corrosion resistant container with a resistant inner liner.

Disposal

- P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards which do not result in classification

- Short-term (acute) aquatic hazard, Category 2 — H401: Toxic to aquatic life.
- Long-term (chronic) aquatic hazard, Category 1 — H410: Very toxic to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

3.1 Substance

- Not applicable, this product is a mixture.

3.2 Mixture

Information on Components and Impurities

Chemical name	CAS-No.	GHS Classification	Concentration [%]
Hydrogen peroxide	7722-84-1	Oxidizing liquids, Category 1 ; H271 Acute toxicity, Category 4 ; H302 Skin corrosion, Sub-category 1A ; H314 Serious eye damage, Category 1 ; H318 Specific target organ toxicity - single exposure, Category 3 ; H335 (Respiratory system) **Specific concentration limits**: C: >= 70 %, Oxidizing liquids, Category 1; H271 C: 50 - < 70 %, Oxidizing liquids, Category 2; H272 C: >= 70 %, Skin corrosion, Category 1A; H314 C: 50 - < 70 %, Skin corrosion, Category 1B; H314 C: 35 - < 50 %, Skin irritation, Category 2; H315 C: 8 - < 50 %, Serious eye damage, Category 1; H318 C: 5 - < 8 %, Eye irritation, Category 2; H319 C: >= 35 %, Specific target organ toxicity - single exposure, Category 3; H335	>= 20 - <= 25
Acetic acid	64-19-7	Flammable liquids, Category 3 ; H226 Skin corrosion, Sub-category 1A ; H314 Serious eye damage, Category 1 ; H318 **Specific concentration limits**: C: >= 90 %, Skin corrosion, Category 1A; H314 C: 25 - < 90 %, Skin corrosion, Category 1B; H314 C: 10 - < 25 %, Skin irritation, Category 2; H315 C: 10 - < 25 %, Eye irritation, Category 2; H319 C: 2.5 - < 10 %, Skin irritation, Category 3; H316	>= 5 - <= 10

Peroxyacetic acid	79-21-0	Flammable liquids, Category 3 ; H226 Organic peroxides, Type D ; H242 Acute toxicity, Category 4 ; H302 Acute toxicity, Category 4 ; H332 Acute toxicity, Category 4 ; H312 Skin corrosion, Sub-category 1A ; H314 Serious eye damage, Category 1 ; H318 Specific target organ toxicity - single exposure, Category 3 ; H335 (Respiratory system) **Specific concentration limits**: C: >= 1 %, Specific target organ toxicity - single exposure, Category 3; H335	>= 5 - <= 5.4
Non-hazardous ingredients *			Balance

* (Ingredients present at non-hazardous concentrations, according to criteria of SWAC (Australia) based on available information).

SECTION 4: First aid measures

4.1 Description of first aid measures

In case of inhalation

- Move to fresh air.
- Oxygen or artificial respiration if needed.
- Victim to lie down in the recovery position, cover and keep him warm.
- Call a physician immediately.

In case of skin contact

- Take off contaminated clothing and shoes immediately.
- Wash off immediately with plenty of water.
- Keep warm and in a quiet place.
- Call a physician or poison control centre immediately.
- Wash contaminated clothing before re-use.

In case of eye contact

- Call a physician or poison control centre immediately.
- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- In the case of difficulty of opening the lids, administer an analgesic eye wash (oxybuprocaine).
- Take victim immediately to hospital.

In case of ingestion

- Call a physician or poison control centre immediately.
- Take victim immediately to hospital.
- If swallowed, rinse mouth with water (only if the person is conscious).
- Do NOT induce vomiting.
- Artificial respiration and/or oxygen may be necessary.

4.2 Most important symptoms and effects, both acute and delayed

In case of inhalation

Symptoms

- Breathing difficulties
- Cough
- Chemical pneumonitis
- pulmonary oedema

Effects

- Severe respiratory irritant

Repeated or prolonged exposure

- Nose bleeding
- Risk of chronic bronchitis

In case of skin contact

Symptoms
- Redness
- Swelling of tissue
- Burn

Effects
- Corrosive

In case of eye contact

Symptoms
- Redness
- Lachrymation
- Swelling of tissue
- Burn

Effects
- Corrosive
- May cause irreversible eye damage.

In case of ingestion

Symptoms
- Nausea
- Abdominal pain
- Bloody vomiting
- Diarrhoea
- Suffocation
- Cough
- Severe shortness of breath

Effects
- If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.
- Risk of respiratory disorder

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

- Take victim immediately to hospital.
- Immediate medical attention is required.
- Consult with an ophthalmologist immediately in all cases.
- Burns must be treated by a physician.
- If swallowed
- Avoid gastric lavage (risk of perforation).
- Keep under medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Water
- Water spray

Unsuitable extinguishing media

- None

5.2 Special hazards arising from the substance or mixture

- May cause fire or explosion; strong oxidiser.
- Oxygen released in thermal decomposition may support combustion

5.3 Advice for firefighters

Special protective equipment for firefighters

- In the event of fire, wear self-contained breathing apparatus.
- Use personal protective equipment.
- Wear chemical resistant oversuit
- Cool containers/tanks with water spray.
- Prevent fire extinguishing water from contaminating surface water or the ground water system.
- Hazchem Code 2P

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel

- Evacuate personnel to safe areas.
- Keep people away from and upwind of spill/leak.

Advice for emergency responders

- Use personal protective equipment.
- Drying of this product on clothing or combustible materials may cause fire.
- Keep wetted with water.
- Prevent further leakage or spillage.
- Keep away from incompatible products

6.2 Environmental precautions

- Discharge into the environment must be avoided.
- Do not flush into surface water or sanitary sewer system.
- In case of accidental release or spill, immediately notify the appropriate authorities if required by Federal, State/Provincial and local laws and regulations.

6.3 Methods and materials for containment and cleaning up

- Dam up.
- Soak up with inert absorbent material.
- Do not let product enter drains.
- Keep in suitable, closed containers for disposal.
- Keep in properly labelled containers.

6.4 Reference to other sections

- Refer to protective measures listed in sections 7 and 8.

Dangerous Goods - Emergency Response Guidebook (ERG) (AU ERG2018)

Guide : 140

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Use only in well-ventilated areas.
- Before all operations, passivate the piping circuits and vessels according to the procedure recommended by the producer.
- Use only clean and dry utensils.
- Never return unused material to storage receptacle.
- May not get in touch with:
- Organic materials
- Keep away from heat.
- Keep away from incompatible products

Hygiene measures

- Ensure that eyewash stations and safety showers are close to the workstation location.
- Take off contaminated clothing and shoes immediately.
- Wash contaminated clothing before re-use.
- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

- Store in original container.
- Keep tightly closed in a dry, cool and well-ventilated place.
- Keep in properly labelled containers.
- Keep in a bunded area.
- Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
- Electrical equipment should be protected to the appropriate standard.
- Keep away from:
- Incompatible products
- OP Storage (Burning Rate) Type IV according to the BGV B4 test method

Packaging material

Suitable material
- Stainless steel cleaned and passivated.
- Approved grades of HDPE.

7.3 Specific end use(s)

- Contact your supplier for additional information

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with national occupational exposure limits

Components	Value type	Value	Basis
Hydrogen peroxide	TWA	1 ppm 1.4 mg/m3	Australia. Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment
Acetic acid	TWA	10 ppm 25 mg/m3	Australia. Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment
Acetic acid	STEL	15 ppm 37 mg/m3	Australia. Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment

Components with other occupational exposure limits

Components	Value type	Value	Basis
Hydrogen peroxide	TWA	1 ppm	USA. ACGIH Threshold Limit Values (TLV)
Acetic acid	TWA	10 ppm	USA. ACGIH Threshold Limit Values (TLV)
Acetic acid	STEL	15 ppm	USA. ACGIH Threshold Limit Values (TLV)
Peroxyacetic acid	STEL	0.4 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Form of exposure : Inhalable fraction and vapor		

8.2 Exposure controls

Control measures

Engineering measures

- Provide adequate ventilation.
- Apply technical measures to comply with the occupational exposure limits.

Individual protection measures

Respiratory protection

- In case of insufficient ventilation, wear suitable respiratory equipment.
- Respirator with a vapour filter (EN 141)
- Recommended Filter type: ABEK-P2

Hand protection

- Impervious gloves
- Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Suitable material

- butyl-rubber
- Break through time: > 480 min
- Glove thickness: >= 0.4 mm

Eye protection

- Chemical resistant goggles must be worn.

- If splashes are likely to occur, wear:
- Tightly fitting safety goggles.
- Face-shield

Skin and body protection

- Apron/boots of butyl rubber if risk of splashing.

Hygiene measures

- Ensure that eyewash stations and safety showers are close to the workstation location.
- Take off contaminated clothing and shoes immediately.
- Wash contaminated clothing before re-use.
- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

- Dispose of rinse water in accordance with local and national regulations.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	pungent
Odour Threshold	No data available
Melting point/freezing point	ca. -42 °C Method: Calculation method
Initial boiling point and boiling range	Boiling point/boiling range: ca. 105 °C Method: Calculation method
Flammability (solid, gas)	Not applicable
Flammability (liquids)	The product is not flammable., Heating may cause a fire.
Flammability/Explosive limit	No data available
Flash point	74 - 83 °C Method: closed cup
Auto-ignition temperature	No data available
Decomposition temperature	>= 60 °C Self-Accelerating decomposition temperature (SADT)
pH	< 2.0 pKa: 8.2 (25 °C)
Viscosity	No data available
Solubility	Water solubility: completely miscible Solubility in other solvents: common organic solvents: soluble Aromatic solvents: slightly soluble
Partition coefficient: n-octanol/water	log Pow: -1.25 Method: Calculation method log Pow: -0.52 Method: measured value
Vapour pressure	ca. 32 hPa (25 °C) Method: Calculation method
Density	No data available

Relative density	1.1
Relative vapor density	No data available
Particle characteristics	No data available
Evaporation rate (Butylacetate = 1)	No data available

9.2 Other information

Explosiveness	Not explosive
Oxidizing properties	The substance or mixture is classified as oxidizing with the category 2. Oxidizer
Corrosion of Metals	Corrosive to metals
Molecular weight	76 g/mol

SECTION 10: Stability and reactivity

10.1 Reactivity

- Decomposes on heating.
- Heating may cause a fire.
- Potential for exothermic hazard

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- Contact with combustible material may cause fire.
- Contact with flammables may cause fire or explosions.
- Risk of explosion if heated under confinement.
- Fire or intense heat may cause violent rupture of packages.

10.4 Conditions to avoid

- Contamination
- To avoid thermal decomposition, do not overheat.

10.5 Incompatible materials

- Acids
- Bases
- Metals
- Heavy metal salts
- Powdered metal salts
- Reducing agents
- Organic materials
- Flammable materials

10.6 Hazardous decomposition products

- Oxygen

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity	LD50 : 652 mg/kg - Rat Test substance: 11,7 % PAA mixture
Acute inhalation toxicity	LC50 - 4 h (dust/mist) 4 mg/l - Rat Test substance: 5 % PAA mixture
Acute dermal toxicity	LD50 Dermal 1,957 mg/kg - Rabbit Test substance: 11,7 % PAA mixture
Acute toxicity (other routes of administration)	No data available
Skin corrosion/irritation	Rabbit Corrosive after 3 minutes to 1 hour of exposure
Serious eye damage/eye irritation	Rabbit Causes serious eye damage.

Respiratory or skin sensitisation

hydrogen peroxide	Does not cause skin sensitisation.
peracetic acid	Maximisation Test - Guinea pig Not classified as sensitising by skin contact according to GHS criteria Method: OECD Test Guideline 406 Unpublished reports

Mutagenicity

Genotoxicity in vitro

hydrogen peroxide	Ames test with and without metabolic activation positive Published data Chromosome aberration test in vitro with and without metabolic activation positive Unpublished reports
acetic acid	Ames test Strain: Salmonella typhimurium with metabolic activation negative Method: OECD Test Guideline 471 Published data Chromosome aberration test in vitro Strain: CHO with and without metabolic activation negative Method: OECD Test Guideline 473 Published data

peracetic acid	Mutagenicity (Salmonella typhimurium - reverse mutation assay) with and without metabolic activation negative Method: according to a standardised method Unpublished reports Chromosome aberration test in vitro Strain: Human lymphocytes with and without metabolic activation negative Method: Mutagenicity (in vitro mammalian cytogenetic test) Unpublished reports Gene mutation assays in mammalian cells. Strain: Chinese hamster lung cells with and without metabolic activation negative Method: according to a standardised method Unpublished reports

Genotoxicity in vivo

hydrogen peroxide	In vivo micronucleus test - Mouse Oral Method: OECD Test Guideline 474 negative Unpublished reports
peracetic acid	In vivo micronucleus test - Mouse male and female Oral Method: Mutagenicity (micronucleus test) negative Unpublished reports

Carcinogenicity

hydrogen peroxide	No data available

Toxicity for reproduction and development

Toxicity to reproduction/Fertility

hydrogen peroxide	No toxicity to reproduction
peracetic acid	No toxicity to reproduction

Developmental Toxicity/Teratogenicity

hydrogen peroxide	No toxicity to reproduction
acetic acid	Rat, female, Oral Teratogenicity NOAEL:1,600mg/kg Method: according to a standardised method Published data
peracetic acid	Developmental Toxicity - Rat, male and female, Oral General Toxicity Maternal NOAEL: 12.5 mg/kg bw/day Developmental Toxicity NOAEL F1: 30.4 mg/kg bw/day Method: OECD Test Guideline 414 no teratogenic effects have been observed, Unpublished reports

STOT

STOT - single exposure

hydrogen peroxide	Exposure routes: Inhalation Target Organs: Respiratory Tract May cause respiratory irritation.
acetic acid	The substance or mixture is not classified as specific target organ toxicant, single exposure.
peracetic acid	Exposure routes: Inhalation Target Organs: Respiratory Tract The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation according to GHS criteria.

STOT - repeated exposure

hydrogen peroxide	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
acetic acid	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
peracetic acid	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
hydrogen peroxide	Inhalation (vapour) 90-day - Rat NOAEC: 7 ppm Target Organs: Respiratory Tract Method: OECD Test Guideline 413 Unpublished reports 90-day - Rat NOAEL: 100 ppm Target Organs: Gastrointestinal tract Method: OECD Test Guideline 408 drinking water Unpublished reports
acetic acid	at high levels Potential health effects Published data Oral 56 d - Rat NOAEL: 290 mg/kg in food
peracetic acid	Oral 90-day - Rat , male and female NOAEL: 23.4 mg/kg Method: OECD Test Guideline 408 Unpublished reports
Experience with human exposure	No data available

CMR effects

Carcinogenicity

acetic acid	No evidence of carcinogenicity in animal studies.

Mutagenicity

acetic acid	Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Aspiration toxicity

acetic acid	Not applicable, Internal evaluation.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic Compartment

Acute toxicity to fish

hydrogen peroxide	LC50 - 96 h : 16.4 mg/l - Pimephales promelas (fathead minnow) semi-static test Analytical monitoring: yes Method: according to a standardised method Harmful to fish. Unpublished internal reports
acetic acid	LC50 - 96 h : > 300 mg/l - Oncorhynchus mykiss (rainbow trout) semi-static test Analytical monitoring: no Method: OECD Test Guideline 203 Not harmful to fish (LC/LL50 > 100 mg/L) Unpublished reports
peracetic acid	LC50 - 96 h : 0.53 mg/l - Oncorhynchus mykiss (rainbow trout) semi-static test Analytical monitoring: no Method: OECD Test Guideline 203 Very toxic to fish. Unpublished reports

Acute toxicity to daphnia and other aquatic invertebrates

hydrogen peroxide	EC50 - 48 h : 2.4 mg/l - Daphnia pulex (Water flea) semi-static test Analytical monitoring: yes Method: according to a standardised method Toxic to aquatic invertebrates. Unpublished internal reports
acetic acid	EC50 - 48 h : > 300 mg/l - Daphnia magna (Water flea) semi-static test Analytical monitoring: yes Method: OECD Test Guideline 202 Not harmful to aquatic invertebrates. (EC/EL50 > 100 mg/L) Unpublished reports
peracetic acid	EC50 - 48 h : 0.73 mg/l - Daphnia magna (Water flea) static test Analytical monitoring: yes Method: OECD Test Guideline 202 Very toxic to aquatic invertebrates. Unpublished reports

Toxicity to aquatic plants

hydrogen peroxide	ErC50 - 72 h : 2.62 mg/l - Skeletonema costatum (marine diatom) static test Analytical monitoring: yes Method: according to a standardised method Toxic to algae. Unpublished internal reports
acetic acid	ErC50 - 72 h : > 300 mg/l - Skeletonema costatum (marine diatom) static test Analytical monitoring: no Method: OECD Test Guideline 201 Not harmful to algae (EC/EL50 > 100 mg/L) Unpublished reports ErC10 - 72 h : 300 mg/l - Skeletonema costatum (marine diatom) static test Analytical monitoring: yes End point: Growth rate Method: OECD Test Guideline 201 No adverse chronic effect observed up to and including the threshold of 1 mg/L. Unpublished reports
peracetic acid	ErC50 - 72 h : 0.16 mg/l - Pseudokirchneriella subcapitata (green algae) static test Analytical monitoring: yes End point: Growth rate Method: according to a standardised method Very toxic to algae. Unpublished reports NOErC - 72 h : 0.061 mg/l - Pseudokirchneriella subcapitata (green algae) static test Analytical monitoring: yes End point: Growth rate Method: according to a standardised method Very toxic to algae with long lasting effects. Unpublished reports

Toxicity to microorganisms

hydrogen peroxide	EC50 - 0.5 h : 466 mg/l - activated sludge static test Analytical monitoring: yes Method: OECD Test Guideline 209 Unpublished internal reports
acetic acid	static test NOEC - 16 h : 1,150 mg/l - Pseudomonas putida semi-static test Analytical monitoring: no Published data
peracetic acid	EC50 - 3 h : 5.1 mg/l - activated sludge static test Analytical monitoring: yes End point: Respiration inhibition Method: OECD Test Guideline 209 Unpublished reports

Chronic toxicity to fish

peracetic acid	NOEC: 0.00094 mg/l - 33 Days - Danio rerio (zebra fish) flow-through test Analytical monitoring: yes Method: OECD Test Guideline 210 Very toxic to fish life with long lasting effects. Unpublished reports

Chronic toxicity to daphnia and other aquatic invertebrates

hydrogen peroxide	NOEC: 0.63 mg/l - 21 Days - Daphnia magna (Water flea) flow-through test Analytical monitoring: yes Method: according to a standardised method Harmful to aquatic invertebrates with long lasting effects. Published data
peracetic acid	NOEC: 0.0121 mg/l - 21 Days - Daphnia magna (Water flea) semi-static test Analytical monitoring: yes Method: OECD Test Guideline 211 Very toxic to aquatic invertebrates with long lasting effects. Unpublished reports

Terrestrial Compartment

Toxicity to soil dwelling organisms

peracetic acid	LC50: > 1,000 mg/kg - 14 d - Eisenia fetida (earthworms) End point: mortality Method: OECD Test Guideline 207 Unpublished reports

Toxicity to terrestrial plants

peracetic acid	EC50: 320 mg/kg - Brassica napus Test period: 21 d Method: OECD Test Guideline 208 Unpublished reports

M-Factor

peracetic acid	Acute aquatic toxicity = 1 Chronic aquatic toxicity = 10 (according to the Globally Harmonized System (GHS))

12.2 Persistence and degradability

Abiotic degradation

Stability in water

peracetic acid	DT50: Hydrolysis pH: 7.0 Temperature of hydrolysis: 25 °C Degree of hydrolysis: 48 % Hydrolysis time: 31.7 h Method: according to a standardised method Unpublished reports

Physical- and photo-chemical elimination	No data available

Biodegradation

Biodegradability

hydrogen peroxide	Ready biodegradability study: Method: Degradation in sewage treatment plants

	The substance fulfills the criteria for ultimate aerobic biodegradability and ready biodegradability Inoculum: activated sludge Unpublished internal reports
acetic acid	Ready biodegradability study: 96 % - 20 Days The substance fulfills the criteria for ultimate aerobic biodegradability and ready biodegradability Inoculum: activated sludge Published data
peracetic acid	Ready biodegradability study: Method: OECD Test Guideline 301F 98 % - 28 d The substance fulfills the criteria for ultimate aerobic biodegradability and ready biodegradability Dissolved organic carbon (DOC) Inoculum: Sewage effluent Unpublished reports

Degradability assessment

hydrogen peroxide	The product is considered to be rapidly degradable in the environment
acetic acid	The product is considered to be rapidly degradable in the environment
peracetic acid	The product is considered to be rapidly degradable in the environment

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water

hydrogen peroxide	Not potentially bioaccumulable
acetic acid	Not potentially bioaccumulable
peracetic acid	Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

Bioconcentration factor (BCF)

hydrogen peroxide	Not potentially bioaccumulable

12.4 Mobility in soil

Adsorption potential (Koc)

hydrogen peroxide	Adsorption/Soil Koc: 1.58 Log Koc: 0.2 Method: Structure-activity relationship (SAR) Unpublished reports
peracetic acid	Adsorption/Soil Koc: 1.46 Method: Structure-activity relationship (SAR) Mobile in soils Unpublished reports

Known distribution to environmental compartments

hydrogen peroxide	Ultimate destination of the product : Water
peracetic acid	Ultimate destination of the product : Water Content: 99.95 % Air

Content: 0.01 %

Sediment
Content: 0.04 %

Soil
Content: 0 %

12.5 Results of PBT and vPvB assessment

hydrogen peroxide	Not persistent, bioaccumulative, and toxic (PBT). Not very persistent and very bioaccumulative (vPvB).
acetic acid	Not persistent, bioaccumulative, and toxic (PBT). Not very persistent and very bioaccumulative (vPvB).
peracetic acid	Not persistent, bioaccumulative, and toxic (PBT). Not very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

Ecotoxicity assessment

Short-term (acute) aquatic hazard	According to the available data on the components Toxic to aquatic life. According to the classification criteria for mixtures. Unpublished reports Published data
Long-term (chronic) aquatic hazard	According to the available data on the components Very toxic to aquatic life with long lasting effects. According to the classification criteria for mixtures. Unpublished reports Published data

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

- Contact manufacturer.
- Contact waste disposal services.
- In accordance with local and national regulations.

Advice on cleaning and disposal of packaging

- Empty containers.
- Clean container with water.
- Dispose of rinse water in accordance with local and national regulations.
- Where possible recycling is preferred to disposal or incineration.
- In accordance with local and national regulations.

SECTION 14: Transport information

Road and Rail transport – ADG (Australia)

14.1 UN number	UN 3149
14.2 Proper shipping name	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED
14.3 Transport hazard class	5.1
Subsidiary hazard class	8
Label(s)	5.1 (8)
14.4 Packing group	
Packing group	II
Hazchem Code	2P
14.5 Environmental hazards	YES
Marine pollutant	
14.6 Special precautions for user	
For personal protection, see section 8.	

IMDG

14.1 UN number	UN 3149
14.2 Proper shipping name	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED
14.3 Transport hazard class	5.1
Subsidiary hazard class	8
Label(s)	5.1 (8)
14.4 Packing group	
Packing group	II
14.5 Environmental hazards	YES
Marine pollutant	
14.6 Special precautions for user	
EmS	F-H , S-Q

For personal protection, see section 8.

14.7 Transport in bulk vessels according to IMO instruments
No data available

IATA

14.1 UN number	UN 3149
14.2 Proper shipping name	Hydrogen peroxide and peroxyacetic acid mixture stabilized
14.3 Transport hazard class	5.1
Subsidiary hazard class	8
Label(s)	5.1 (8)
14.4 Packing group	
Packing group	II
14.5 Environmental hazards	YES
Marine pollutant	
14.6 Special precautions for user	
Packing instruction (cargo aircraft)	554
Max net qty/pkg	5.00 L
Packing instruction (passenger aircraft)	550
Max net qty/pkg	1.00 L

For personal protection, see section 8.

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information

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

Poison Schedule (SUSMP Australia)

- Schedule 6: Poison
- Please use the original publication to check for specific uses, specific conditions or threshold limits that might apply for this chemical.

Notification status

Inventory Information	Status
United States TSCA Inventory	- All substances listed as active on the TSCA inventory
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australian Inventory of Industrial Chemicals (AIIC)	- Listed on Inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- Listed on Inventory
Taiwan Chemical Substance Inventory (TCSI)	- Listed on Inventory
New Zealand. Inventory of Chemical Substances	- All components are listed on the NZIoC inventory. Additional HSNO obligations may apply. Please refer to Section 15 of SDS for New Zealand.

EU. European Registration, Evaluation, Authorization and Restriction of Chemical (REACH)	- When purchased from a Solvay legal entity based in the EEA (""European" "Economic Area""), this product is compliant with the registration" provisions of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, and/or registered. When purchased from a legal entity outside of the EEA, please contact your local representative for additional information.

SECTION 16: Other information

Full text of H-Statements

- H226: Flammable liquid and vapour.
- H227: Combustible liquid.
- H242: Heating may cause a fire.
- H271: May cause fire or explosion; strong oxidiser.
- H272: May intensify fire; oxidizer.
- H290: May be corrosive to metals.
- H302: Harmful if swallowed.
- H312: Harmful in contact with skin.
- H314: Causes severe skin burns and eye damage.
- H318: Causes serious eye damage.
- H332: Harmful if inhaled.
- H335: May cause respiratory irritation.
- H401: Toxic to aquatic life.
- H410: Very toxic to aquatic life with long lasting effects.

Key or legend to abbreviations and acronyms used in the safety data sheet

- STEL: Exposure standard - short term exposure limit
- TWA: Exposure standard - time weighted average
- ca.: approximately
- ADR: European Agreement on International Carriage of Dangerous Goods by Road.
- ADN: European Agreement on the International Carriage of Dangerous Goods by Inland Waterways.
- RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
- IATA: International Air Transport Association.
- ICAO-TI: Technical Instructions for Safe Transport of Dangerous Goods by Air.
- IMDG: International Maritime Dangerous Goods.
- TWA: Time weighted average
- ATE: Estimated value of acute toxicity
- EC: European Community number
- CAS: Chemical Abstracts Service.
- LD50: Substance that causes 50% (half) death in the test animals group (Median Fatal Dose).
- LC50: Substance concentration causing 50% (half) death in the test animals group.
- EC50: Effective Concentration of the substance causing the maximum of 50%.
- PBT: Persistent, Bioaccumulative and Toxic substance.
- vPvB: Very Persistent and Very Bioaccumulative.
- GHS/CLP/SEA: Classification, labeling, packaging regulation
- DNEL: Derived No Effect Level
- PNEC: Predicted No Effect Concentration
- STOT: Specific Target Organ Toxicity

Not all acronyms listed above are referenced in this SDS.

Further information

- Distribute new edition to clients

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.