SAFETY DATA SHEET
PERACETIC ACID 15%

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

1.1. Product identifier

Product name	PERACETIC ACID 15%
Product number	FP0094
Synonyms; trade names	PAA, Peroxyethanoic acid.
Container size	5 Lit, 25 Lit, 200 Lit, 1000Lit
REACH registration notes	REACH Registration Number: 01-2119531330-56-xxxx
CAS number	79-21-0
EU index number	607-094-00-8
EC number	201-186-8

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

Identified uses	Disinfectant/sanitiser.
Uses advised against	Uses other than those identified are not recommended.

1.3. Details of the supplier of the safety data sheet

Supplier	Water Technology Limited Togher Industrial Estate Cork Ireland Tel: 00353-(0)21-4965600 Fax: 00353-(0)21-4313876 E-mail: info@wtlireland.com
Contact person	SDS contact: info@wtlireland.com

1.4. Emergency telephone number

Emergency telephone	353-21-4965600 (Water Technology Ltd. 08:00 - 17:30pm).
National emergency telephone number	National Poisons Information Centre (NPIC) +353 (01) 809 2166

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Org. Perox. F - H242 Met. Corr. 1 - H290
Health hazards	Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Corr. 1A - H314 Eye Dam. 1 - H318 STOT SE 3 - H335
Environmental hazards	Aquatic Chronic 1 - H410

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Classification (67/548/EEC or 1999/45/EC) Xn;R20/21/22. C;R35. Xi;R37. O;R7.

2.2. Label elements

EC number 201-186-8

Pictogram

Signal word Danger

Hazard statements

H242 Heating may cause a fire.
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.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P234 Keep only in original packaging.
P235+P410 Keep cool. Protect from sunlight.
P240 Ground and bond container and receiving equipment.
P260 Do not breathe vapour/ spray.
P261 Avoid breathing vapour/ spray.
P264 Wash contaminated 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.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of water.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 CENTER/ doctor.
P321 Specific treatment (see medical advice on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
P390 Absorb spillage to prevent material damage.
P391 Collect spillage.
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.
P411 Store at temperatures not exceeding °C/°F.
P420 Store separately.
P501 Dispose of contents/ container in accordance with national regulations.

Contains HYDROGEN PEROXIDE SOLUTION ... %, ACETIC ACID ...%, PERACETIC ACID ...%

2.3. Other hazards

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None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

HYDROGEN PEROXIDE SOLUTION ... % **10-30%**

CAS number: 7722-84-1 EC number: 231-765-0

Classification
Ox. Liq. 2 - H272
Acute Tox. 4 - H302
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
STOT SE 3 - H335

Classification (67/548/EEC or 1999/45/EC)
R5 O;R8 C;R35 Xn;R20/22

ACETIC ACID ...% **10-30%**

CAS number: 64-19-7 EC number: 200-580-7

Classification
Flam. Liq. 3 - H226
Skin Corr. 1A - H314
Eye Dam. 1 - H318

Classification (67/548/EEC or 1999/45/EC)
R10 C;R35

PERACETIC ACID ...% **10-30%**

CAS number: 79-21-0 EC number: 201-186-8

M factor (Acute) = 1 M factor (Chronic) = 10

Classification
Flam. Liq. 3 - H226
Org. Perox. D - H242
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Acute Tox. 4 - H332
Skin Corr. 1A - H314
Eye Dam. 1 - H318
STOT SE 3 - H335
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

Classification (67/548/EEC or 1999/45/EC)
O;R7 R10 C;R35 Xn;R20/21/22 N;R50

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Remove the exposed person from the contaminated area as soon as possible. Transport him/her lying down, with the head higher than the body, to a quiet uncontaminated and well-ventilated location. Consult with a physician in all cases.

Ingestion Do not induce vomiting. Provided the patient is conscious, wash out the mouth with water and give about 500ml of water to drink. Obtain medical attention urgently. If the person is unconscious, use classical resuscitation measures.

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Skin contact Use Diphoterine spray if available or flush the contaminated skin with plenty of water. Promptly remove clothing if soaked through and flush the skin with water. Get medical attention immediately.

Eye contact Use Diphoterine Eyewash immediately, if available or flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. Get medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation Corrosive to respiratory system. Symptoms:Breathing difficulties, cough, chemical pneumonitis, pulmonary oedema. Repeated or prolonged exposure: Nose bleeding, chronic bronchitis.

Ingestion If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. Symptoms: Nausea, Abdominal pain, Bloody vomiting, Diarrhoea, Suffocation,Cough, Severe shortness of breath. Risk of Respiratory disorder.

Skin contact Causes severe burns. Symptoms: Redness. Swelling of tissue.Burn.

Eye contact Causes severe burns. Small amounts splashed into eyes can cause irreversible tissue damage and blindness. Symptoms: Redness, Lachrymation, Swelling of tissue. Burn.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Take victim immediately to hospital. Immediate medical attention is required. Consult with an ophthalmologist immediately in all cases. 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 Water,water spray. No restriction on extinguishing means.

Unsuitable extinguishing media None known.

5.2. Special hazards arising from the substance or mixture

Specific hazards Oxidizer. Oxygen released on exothermic decomposition may support combustion in case of surrounding fire.Oxidising agent, may cause spontaneous ignition of combustible materials. Contact with flammables may cause fire or explosions. Pressure burst may occur due to decomposition in confined spaces/containers. See Specific Hazards.

Hazardous combustion products No known hazardous decomposition products.

5.3. Advice for firefighters

Protective actions during firefighting See Protective Equipment for Fire-fighters.

Special protective equipment for firefighters Evacuate all non-essential personnel. Intervention only by capable personnel who are trained and aware of the hazards of the product. Wear self-contained breathing apparatus when in close proximity or in confined spaces. When intervention in close proximity, wear acid resistant over-suit. After intervention, proceed to clean the equipment (take a shower, remove clothing carefully, clean and check). Other Precautions: If safe to do so, remove the exposed containers, or cool with large quantities of water. Approach from upwind. Stay at safe distance in a protected location sheltered from possible projectiles. Never approach containers which have been exposed to fire, without cooling them sufficiently.

SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Isolate the area. Approach from upwind. Keep away materials and products which are incompatible with the product (see section 10). If safe to do so, without over exposing anyone, try to stop the leak. In case of contact with combustible materials, avoid product drying out, by dilution with water.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up If possible, dam large quantities of liquid with sand or earth. Dilute with large quantities of water. Do not add chemical products. For disposal methods, refer to section 13. In order to avoid the risk of contamination, the recovered product must not be returned to the original tank/container.

6.4. Reference to other sections

Reference to other sections See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Operate in a well-ventilated area. Keep away from heat sources. Keep away from incompatible products. Prevent all contact with organics. Use only equipment and materials which are compatible with the product. Before all operations, passivate the piping circuits and vessels according to the procedure recommended by the producer. Never return unused product to storage container. Containers and equipment used to handle the product should be used exclusively for that product.

Advice on general occupational hygiene Ensure that eyewash stations and safety showers are close to the workplace location. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before reuse. 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

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat sources, incompatible products and combustible substances. Keep away from heat sources, incompatible products and combustible substances. Keep in container fitted with safety valve or vent. Keep in container fitted with safety valve or vent. Containment bund around storage containers and transfer installation. For bulk storage, consult the producer. Containment bund around storage containers and transfer installation. For bulk storage, consult the producer. Other precautions: Warn people about the dangers of the product. Follow the protective measures given in section 8. Do not confine the product in a circuit, between closed valves or in a container without a vent. In industrial installations, apply the rules for the prevention of major accidents (consult an expert). Other precautions: Warn people about the dangers of the product. Follow the protective measures given in section 8. Do not confine the product in a circuit, between closed valves or in a container without a vent. In industrial installations, apply the rules for the prevention of major accidents (consult an expert). Organic Peroxide Storage (Burning Rate) Type IV according to the BGV B4 test method. Organic Peroxide Storage (Burning Rate) Type IV according to the BGV B4 test method.

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Storage class Chemical storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

HYDROGEN PEROXIDE SOLUTION ... %

Long-term exposure limit (8-hour TWA): WEL 1 ppm 1.4 mg/m³
Short-term exposure limit (15-minute): WEL 2 ppm 2.8 mg/m³

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Long-term exposure limit (8-hour TWA): 0.15 ppm
WEL = Workplace Exposure Limit

DNEL Hydrogen Peroxide: Workers. Inhalation. Local effects. Acute. 3mg/m3. Workers. Inhalation. Local effects. Long term. 1.4mg/m3. Consumers. Inhalation. Local effects. Acute. 1.93mg/m3. Consumers. Inhalation. Local Effects. Long term. 0.21mg/m3. Acetic Acid: General Population. Inhalation. Local effects. Acute. 25mg/m3. General Population. Inhalation. Systemic effects. Long term. 25mg/m3. General Population. Oral. Systemic effects. Long term. 7.20 microgram/kg bw/day. Peracetic Acid: Workers. Inhalation. Systemic effects. Acute. 0.6mg/m3. Workers. Inhalation. Systemic effects. Long term. 0.6mg/m3. Workers. Inhalation. Local effects. Acute. 0.6mg/m3. Workers. Inhalation. Local effects. Long term. 0.6mg/m3. Workers. Dermal. Local effects. Acute. 0.12%. Consumers. Inhalation. Systemic effects. Acute. 0.6mg/m3. Consumers. Inhalation. Systemic effects. Long term. 0.6mg/m3. Consumers. Inhalation. Local effects. Long term. 0.6mg/m3. Consumers. Inhalation. Local effects. Acute. 0.3mg/m3. General Population. Dermal. Local effects. Acute. 0.12%

PNEC Hydrogen Peroxide: Freshwater 0.0126mg/l. Marine water 0.0126 mg/l. Sewage Treatment Plant. 4.66 mg/l. Intermittent use/release. 0.0138 mg/l. Freshwater Sediment. 0.047mg/kg. Marine Sediment. 0.047 mg/kg. Soil. 0.0023 mg/kg. Peracetic Acid: Fresh water: 0.000224 mg/l. Sewage Treatment Plant: 0.051mg/l. Fresh Water Sediment. 0.00018mg/kg. Soil. 0.320 mg/kg.

8.2. Exposure controls

Protective equipment

Appropriate engineering controls Premises ventilation. Provide local ventilation suitable for the emission risk. Maintain employee exposures to levels below the applicable exposure limits.Follow the protective measures given in section 7. Authorized Limit Values: Peracetic Acid: TWA=0.15 ppm. Hydrogen Peroxide: TWA=1 ppm, TWA= 1.4mg/m3, STEL=2 ppm, STEL= 2.8mg/m3. Acetic Acid: TWA=25mg/m3, TWA=10ppm. STEL= 37mg/m3, STEL=15ppm.

Eye/face protection Tightly sealed safety glasses according to EN166.

Hand protection For hand protection, wear approved gloves made of nitrile, PVC or neoprene. DO NOT use cotton, wool, leather as these materials react rapidly with higher concentrations of hydrogen peroxide. Thoroughly, rinse the outside of the gloves with water prior to removal. Inspect regularly for leaks. To protect hands from chemicals, gloves should comply with European Standard EN374. Suitable material: Butyl rubber. Break-through time >480min. Glove thickness >/= 0.4mm.

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Other skin and body protection	Shower and eyewash stations. Consult the industrial hygienist or the safety manager for the selection of personal protective equipment suitable for the working conditions. For full body protection, wear protective clothing such as an approved splash protective suit made of SBR Rubber, PVC (PVC Outershell w/Polyester Substrate), Gore-Tex (Polyester trilaminate w Gore-Tex), or a specialized HAZMAT Splash or protective suit (Level A, B or C). For foot protection, wear approved boots made of NBR, PVC, Polyurethane or neoprene. Overboots made of Latex or PVC, as well as fire-fighter boots or specialized HAZMAT boots are also permitted. DO NOT wear any form of boot or overboots made of nylon or nylon blends. DO NOT use cotton, wool or leather as these materials react rapidly with higher concentrations of hydrogen peroxide. Completely submerge hydrogen peroxide contaminated clothing or other materials in water prior to drying. Residual hydrogen peroxide, if allowed to dry on materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.
Hygiene measures	Wash hands during breaks and at the end of the shift. Avoid contact with the eyes.
Respiratory protection	Product as sold:- In case of emissions, face mask with type B cartridge. Self contained breathing apparatus in medium confinement/insufficient oxygen/ in case of large uncontrolled emissions/in all circumstances when the mask and cartridge do not give adequate protection. Use only respiratory protection that conforms to international/national standards. Self-contained breathing apparatus (EN133). Respirator with a vapour filter (EN141). Recommended filter type: ABEK-P2. Product at Use Dilution: No special protection is required.
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

Appearance	Clear liquid.
Colour	Colourless.
Odour	Pungent.
Odour threshold	Data lacking.
pH	< 1.5
Melting point	~ -42 C (Mehod: Calculation method).
Initial boiling point and range	~ 105 C (Method: Calculation Method).
Flash point	68-81 C (Flammable vapours may occur above the SADT).
Evaporation rate	Data lacking.
Other flammability	Explosiveness: Not explosive. Ignition Temperature:- 270 - 430 C.
Vapour pressure	~ 32 hPa (25 C). Method: Calculation method.
Vapour density	Data lacking.
Relative density	1.1
Solubility(ies)	Water Solubility:- 1.000g/l (20 C). Completely miscible. Solubility in other solvents:- Organic Polar Solvents: Soluble. Aromatic Solvents:- Slightly soluble.
Partition coefficient	log Pow: -1.25 Calculated value. log Pow: -0.52. Method: Measured value.
Auto-ignition temperature	Data lacking.
Decomposition Temperature	Thermal decomposition: >/= 55 C. Self-Accelerating Decomposition Temperature.(SADT).

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Viscosity	Data lacking.
Explosive properties	Not applicable.
Oxidising properties	Oxidizer.

9.2. Other information

Other information	Corrosive to metals. The substance or mixture is an organic peroxide classified as type F. Formula: CH3-COOOH.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stability	Stable under normal conditions of use with slow gas release. Possible instability after three continuous exposure months at temperatures >=35 C.

10.3. Possibility of hazardous reactions

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. Hazardous polymerisation will not occur. No data available.

10.4. Conditions to avoid

Conditions to avoid	Contamination. To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

Materials to avoid	Avoid acids, bases, metals, salts of metals, reducing agents, organic materials, flammable substances.

10.6. Hazardous decomposition products

Hazardous decomposition products	Oxygen. Decomposition releases steam/noxious fumes/heat.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Other health effects	Chronic Toxicity: Mutagenic effect in vitro but not in vivo. Oral route, after repeated exposure, rat, no systemic effect. Dermal route, after repeated exposure, guinea pig>=0.12%, irritating effect.Inhalation, after a single exposure, rat, 5mg/m3, irritating effect. No carcinogenic effect. Toxic effect linked with corrosive properties.

Acute toxicity - oral

Notes (oral LD_{50})	11.7% PAA mixture.
ATE oral (mg/kg)	1,315.79

Acute toxicity - dermal

Notes (dermal LD_{50})	11.7% PAA mixture.
ATE dermal (mg/kg)	1,100.0

Acute toxicity - inhalation

Summary	LC50-4h (dust/mist) 4mg/l-Rat. Test substance: 5% PAA mixture.
Notes (inhalation LC_{50})	LC50 rat, 0.5-1.3 mg/l, aerosol (15% PAA mixture). Inhalation, Irritation to respiratory system. (1% PAA mixture).

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ATE inhalation (gases ppm)	11,842.11
ATE inhalation (vapours mg/l)	28.95
ATE inhalation (dusts/mists mg/l)	3.95

Skin corrosion/irritation

Animal data	Rabbit, Corrosive (10% PAA mixture).

Serious eye damage/irritation

Serious eye damage/irritation	Rabbit. Risk of serious damage to eyes. (10% PAA mixture).

Respiratory sensitisation

Respiratory sensitisation	Guinea pig. Did not cause sensitization on laboratory animals.

Skin sensitisation

Skin sensitisation	Guinea pig. Did not cause sensitization on laboratory animals.

Germ cell mutagenicity

Summary	Acetic Acid: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Genotoxicity - in vitro	In vitro tests have shown mutagenic effects.
Genotoxicity - in vivo	Animal testing did not show any mutagenic effects.

Carcinogenicity

Summary	Acetic Acid: No evidence of carcinogenicity in animal studies.
Carcinogenicity	Not classified due to inconclusive data.

Reproductive toxicity

Reproductive toxicity - fertility	No toxicity to reproduction.
Reproductive toxicity - development	Rat. Test substance: 15% PAA Mixture. No effect observed on development. Published data.

Specific target organ toxicity - single exposure

STOT - single exposure	May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	The substance or mixture is not classified as specific target organ toxicant, repeated exposure. Ingestion 13 weeks-Rat. NOAEL: 0.75 mg/kg. Test substance:Peracetic Acid. Oral 90 day-Mouse. NOAEL: 100ppm. Test substance: Hydrogen peroxide. Inhalation 90 day-Rat. NOAEL: 7ppm. Test substance: Hydrogen Peroxide.

Aspiration hazard

Aspiration hazard	No data available.

SECTION 12: Ecological Information

Ecotoxicity	Chronic Ecotoxicity: Terrestrial plants, various species, LOEC, phytotoxicity, 10mg/l. Result: phytotoxic effect.

12.1. Toxicity

Toxicity	Toxic for aquatic organisms. Nevertheless, hazard for the environment is limited due to product properties: no bioaccumulation, considerable abiotic and biotic degradability, weak persistence of degradation products.

Acute aquatic toxicity

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Acute toxicity - fish LC50, 96 hours: 7.2 mg/l, Brachydanio rerio (Zebra Fish)
LC50-96h: 1.1mg/l-Lepomis macrochirus (Bluegill sunfish). NOEC-33d: 0.00094 mg/l-Danio rerio (zebra fish). Early-life stage.

Acute toxicity - aquatic invertebrates EC_{50}, 48 hours: 3.2 (15% PAA mixture) mg/l, Daphnia magna
EC50-48h:0.73mg/l-Daphnia magna (water flea).

Acute toxicity - aquatic plants EC_{50}, 72 hours: 5.7 mg/l,
IC_{50}, 72 hours: mg/l, Algae
EC50-96h: 0.16mg/l-Pseudokirchneriella subcapitata (green algae).

12.2. Persistence and degradability

Persistence and degradability Abiotic Degradation-Air, t 1/2 ca 2.6d. Result: The product can be degraded by abiotic (e.g. chemical or photolytic) processes. Water t 1/2 (Hydrolysis) ca 120h. Result: Chemical degradation. Soil, <99%, 0.5h. Result : Chemical degradation (1% solution). Degradability Assessment: Acetic Acid-The product is considered to be rapidly degradable in the environment.

Biodegradation Aerobic: Tested according to Closed Bottle Test, ca 56% after 28d. Result: Not biodegradable. Aerobic: Tested according to Ready Biodegradability/MITI, from 2mg/l, >70% after 28d. Result: Readily biodegradable.Effects on waste water treatment plants, 90mg/l. Result: Inhibitory action. Effects on waste water treatment plants. BOD increase of treated effluent by acetic acid formation.

12.3. Bioaccumulative potential

Bioaccumulative potential Not bioaccumulable.

Partition coefficient log Pow: -1.25 Calculated value. log Pow: -0.52. Method: Measured value.

12.4. Mobility in soil

Mobility Water-Solubilities, Mobility. Soil/Sediments, log KOC:0.63. Non-significant adsorption. Air , Volatility, Henry's law constant (H), 0.22 hPa.m3/mol, Not significant. Known distribution to environmental compartments: Acetic Acid-Ultimate destination of the product:Water. Structure -activity relationship (SAR). Air. Structure-activity relationship (SAR).

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). The mixture contains no substance considered to be very persistent, nor very bioaccumulating (vPvB).

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Small quantities: Dilute until 0.1% with water. After this treatment, the product can be dispatched into a biological treatment plant. Large quantities: Contact the producer. Packaging treatment: Rinse the empty containers with plenty of water and treat the effluent in the same way as waste. Do not rinse the dedicated containers. The empty and clean containers are to be used in conformity with regulations.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

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SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	3109
UN No. (IMDG)	3109
UN No. (ICAO)	3109
UN No. (ADN)	3109

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ORGANIC PEROXIDE TYPE F, LIQUID (PEROXYACETIC ACID, TYPE F, stabilized)
Proper shipping name (IMDG)	ORGANIC PEROXIDE TYPE F, LIQUID (PEROXYACETIC ACID, TYPE F, stabilized) (CONTAINS PERACETIC ACID ...%)
Proper shipping name (ICAO)	ORGANIC PEROXIDE TYPE F, LIQUID (PEROXYACETIC ACID, TYPE F, stabilized)
Proper shipping name (ADN)	ORGANIC PEROXIDE TYPE F, LIQUID (PEROXYACETIC ACID, TYPE F, stabilized)

14.3. Transport hazard class(es)

ADR/RID class	5.2
ADR/RID subsidiary risk	8
ADR/RID label	5.2
IMDG class	5.2
IMDG subsidiary risk	8
ICAO class/division	5.2
ICAO subsidiary risk	8
ADN class	5.2
ADN subsidiary risk	8

Transport labels

14.4. Packing group

ADR/RID packing group	None
IMDG packing group	None
ADN packing group	None
ICAO packing group	None

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user

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EmS	F-J, S-R
ADR transport category	2
Emergency Action Code	2W
Hazard Identification Number (ADR/RID)	539
Tunnel restriction code	(D)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

SECTION 15: Regulatory information

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

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Council Directive 98/24/EC of 7 April 1998 on the protection of the health & safety of workers from the risks related to chemical agents at work, as amended.

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS
In compliance with REACH.

Canada - DSL/NDSL
Listed on inventory.

US - TSCA
Listed on inventory.

Australia - AICS
Listed on inventory.

Japan - MITI
Listed on inventory.

Korea - KECI
Listed on inventory.

China - IECSC
Listed on inventory.

Philippines – PICCS
Listed on inventory.

New Zealand - NZIOC
Listed on inventory.

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SECTION 16: Other information

General information	All personnel involved in the use, handling and transport of this product should be familiar with the first aid measures and personal protective equipment requirements associated with the material. PCS No. 94443
Key literature references and sources for data	Source: European Chemicals Agency, http://echa.europa.eu/ Supplier Safety Data Sheets
Revision comments	All sections have been revised.
Issued by	Compliance Dept.
Revision date	16/10/2018
Revision	04
Supersedes date	29/08/2016
SDS number	10192
SDS status	Approved.
Risk phrases in full	R10 Flammable. R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R20/22 Harmful by inhalation and if swallowed. R35 Causes severe burns. R37 Irritating to respiratory system. R5 Heating may cause an explosion. R50 Very toxic to aquatic organisms. R7 May cause fire. R8 Contact with combustible material may cause fire.
Hazard statements in full	H226 Flammable liquid and vapour. H242 Heating may cause a fire. H272 May intensify fire; oxidiser. H290 May be corrosive to metals. H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. H332 Harmful if inhaled. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
Signature	P.Corcoran