1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1	**Product identifiers**	DP1015
	Trade Name or designation	BioKill
1.2	**Identification of Uses**	Disinfectant
	Uses advised against	No specific uses are advised against
1.3	**Supplier**	Biolink Limited. Halifax Way Pocklington Ind. Est Pocklington York YO42 1NR
	Telephone No.	+44 (0) 1759 303444
	Fax No.	+44 (0) 1759 303158
	Email	info@biolinklimited.co.uk
1.4	**Emergency Phone**	+44 (0) 1280 738605 (office hours only)

2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to 67/548/EEC or 1999/45/EEC as amended

O, C, N, R8, R34, R20/21/22

Classification in accordance to EC 1272/2008 as amended

PHYSICAL HAZARDS		
Organic Peroxide	Type F	H242 Heating may cause fire
Corrosive to metals	Category 1	H290 May be corrosive to metals
HEALTH HAZARDS		
Acute Toxicity Dermal	Category 4	H312 Harmful in contact with skin
Acute Toxicity Inhalation	Category 4	H332 Harmful if inhaled
Acute Toxicity Oral	Category 4	H302 Harmful if swallowed
Eye Damage	Category 1	H318 Causes serious eye damage
Skin Corrosive	Category 1A	H314 Causes severe skin burns and eye damage
Specific Target Organ Toxicity Single Exposure	Category 3	H335 May cause respiratory irritation
ENVIRONMENTAL HAZARDS		
Aquatic Chronic Toxicity	Category 1	H410 Very toxic to aquatic life with long lasting effects

Hazard summary

Physical hazards

Heating may cause fire. May be corrosive to metals.

Health hazards

Harmful in contact with skin. Harmful if inhaled. Harmful if swallowed. Causes severe skin burns and eye damage. May cause respiratory irritation

Environmental hazards
Very toxic to aquatic life with long lasting effects
Specific hazards
Corrosive to the respiratory tract.
Main symptoms
Harmful in contact with skin. Symptoms may include discomfort, redness, swelling. Harmful if inhaled. Symptoms may include nausea and discomfort to the upper respiratory tract. Harmful if swallowed. Symptoms may include nausea and discomfort. Burning pain and severe corrosive skin damage. Rash. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

2.2 Label elements

Label in accordance with EC 1272/2008 as amended

Contains PERACETIC ACID; HYDROGEN PEROXIDE SOLUTION; ACETIC ACID

Hazard pictograms

Signal word Danger

Hazard statements
H242 Heating may cause fire
H290 May be corrosive to metals
H312 Harmful in contact with skin
H332 Harmful if inhaled
H302 Harmful if swallowed
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

Prevention
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
P234 Keep only in original container
P273 Avoid release to the environment
P280 Wear protected gloves/protective clothing/eye protection/face protection.

Response
P302+352 IF ON SKIN: Wash with plenty of water/soap.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage
P405 Store Locked up.

Disposal
P501 Dispose of contents/container in accordance with local regulations.

Supplemental label information
EUH071 Corrosive to the respiratory tract.

2.3 Other hazards

Risk of decomposition in contact with incompatible substances, impurities, metals, alkalis, reducing agents.

3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

PERACETIC ACID			4.5 - -5.4 %
CAS-No.: 79-21-0	EC No.: 201-186-8	EC Index No.: 607-094-00-8	Reach No.: 01-2119485845-22
Classification (67/548/EEC) O, Xn, C, N, R10, R, R20/21/22, R35, R50		Classification (EC 1272/2008) Flam. Liq. 3 - H226 Org. peroxide D - H242 Acute tox. 3 - H331 Acute tox. 4 - H312 Acute tox. 3 - H301 Skin corr. 1A - H314 Eye dam. 1 H318 STOT SE 3 - H335 Aq. Acute Tox.1 - H400 Aq. Chronic Tox. 1 H410	

HYDROGEN PEROXIDE			24 – 29 %
CAS-No.: 7722-84-1	EC No.: 231-765-0	EC Index No.: 008-003-00-9	Reach No.: 01-2119485845-22
Classification (67/548/EEC) O, C, Xn, R8, R35, R20/22,		Classification (EC 1272/2008) Ox. Liq.1 - H271 Acute Tox. 4 - H332 Acute Tox. 4 - -H302 Skin Corr. 1A -H314 Aq. Chronic Tox. 3 – H412	

ACETIC ACID			6 – 7 %
CAS-No.: 64-19-7	EC No.: 200-580-7	EC Index No.:	Reach No.: 01-2119475328-30
Classification (67/548/EEC) C, R10, R35		Classification (EC 1272/2008) Flam.liq. 3 -H226 Skin Corr. 1A -H314	

POLYPHOSPHORIC ACIDS			1 – 2 %
CAS-No.: 8017-16-1	EC No.: 232-417-0	EC Index No.:	Reach No.:
Classification (67/548/EEC) C, R34		Classification (EC 1272/2008) Skin Corr. 1B – H314 Eye Dam. 1 – H318	

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

4 - FIRST AID MEASURES

General Information
First aiders should wear suitable protective clothing.

4.1 Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Get medical attention. Provide rest, warmth and fresh air. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Ingestion

Move the exposed person to fresh air at once. Get medical attention. Provide rest, warmth and fresh air. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Skin contact

Remove contaminated clothing. Wash off with plenty of water. Consult a doctor if symptoms persist.

Eye contact

Remove contaminated clothing. Wash off with plenty of water. Consult a physician if symptoms persist.

4.2 Most important symptoms and effects, both acute and delayed

Burning and discomfort. Corrosive damage to the eyes, skin, nose, throat or gastrointestinal tract.

4.3 Indication of any immediate medical attention and special treatment needed

Rinse eye immediately with sterile saline solution.

Seek medical attention in case of ingestion, inhalation or contact with eyes.

The initial focus is on the local action, characterised by quickly progressing deep tissue damage. In the eye, caustic/irritating and harmful liquids cause, depending on the intensity of the exposure, various levels of irritation, destruction and ablation of the epithelium of the conjunctiva and corneal clouding, oedema and ulcerations Danger! Possible loss of eyesight! Superficial irritations and damage to ulcerations and scarring develop on the skin. After accidental absorption in the body, the pathology and clinical findings are dependent on the kinetics of the substance (quantity of absorbed substance, the absorption time, and the effectiveness of early elimination measures (first aid/excretion – metabolism) A specific action of the substance is unknown In case of substances with high water solubility, irritations up to formation of necrosis in the upper respiratory tract may result after inhalation of caustic/irritating aerosols and mists. The initial focus is on the local action: Signs of irritation of the respiratory tract such as coughing, burning behind the sternum, tears, burning in the eyes or nose There is risk of pulmonary oedema!

5 - FIRE FIGHTING MEASURES

General Fire Hazards

5.1. Extinguishing media

SUITABLE EXTINGUISHING MEDIA

Water spray, Dry powder, foam.

UNSUITABLE EXTINGUISHING MEDIA

None

5.2. Special hazards arising from the substance or mixture

UNUSUAL FIRE & EXPLOSION HAZARDS

In case of fire toxic gases may be released. (COx, NOx, HCl).

SPECIFIC HAZARDS

None noted.

5.3. Advice for fire-fighters

SPECIAL FIRE FIGHTING PROCEDURES

Collect fire extinguishing water separately, do not allow to enter drains. Exceptionally large spillages should be notified to the appropriate authorities.

PROTECTIVE EQUIPMENT FOR FIRE-FIGTHERS

Wear self-contained breathing apparatus.

6 - ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Keep unnecessary people away. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.

6.2. Environmental precautions

Do not let product enter drains. Discharge into the environment must be avoided. Appropriate authorities should be notified in case of contamination of sewerage or surface water.

6.3. Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. If possible contain the spillage with adsorbent material, place in a suitable container and dispose of as described in section 13 of this safety data sheet.

6.4. Reference to other sections

Personal protection –section 8.
Disposal considerations –Section 13.

7 - HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure good ventilation when using this product, avoid inhalation of vapours and spray. Handle with care and avoid spilling, skin and eye contact. Do not handle broken packages without protective equipment. Keep away from heat, sparks and open flame. Do not eat, drink or smoke when using the product. Observe good chemical hygiene practices. Container must be kept tightly closed. Protect against direct heat and sunlight. Follow instructions before use.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container

7.3 Specific end use(s)

Disinfectant

8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Component	CAS-No.	Value	Control Parameters	Basis
HYDROGEN PEROXIDE	7722-84-1	TWA	1 ppm 1.4 mg/m^3	Austrian OEL Regulation
HYDROGEN PEROXIDE	7722-84-1	STEL	2 ppm 2.8 mg/m^3	Austrian OEL Regulation
HYDROGEN PEROXIDE	7722-84-1	TWA	1 ppm 1.4 mg/m^3	Belgium VLEP/GWBB
HYDROGEN PEROXIDE	7722-84-1	TWA	1 ppm 1.4 mg/m^3	Denmark
HYDROGEN PEROXIDE	7722-84-1	STEL	2 ppm 2.8 mg/m^3	Denmark
HYDROGEN PEROXIDE	7722-84-1	TWA	1 ppm 1.5 mg/m^3	France INRS
HYDROGEN PEROXIDE	7722-84-1	TWA	0.5 ppm 0.71 mg/m^3	Germany DFG
HYDROGEN PEROXIDE	7722-84-1	STEL	0.5 ppm 0.71 mg/m^3	Germany DFG
HYDROGEN PEROXIDE	7722-84-1	TWA	1 ppm 1.5 mg/m^3	Ireland
HYDROGEN PEROXIDE	7722-84-1	STEL	2 ppm 3 mg/m^3	Ireland
HYDROGEN PEROXIDE	7722-84-1	TWA	1 ppm 1.4 mg/m^3	Spain - Royal Decree 374/2001
HYDROGEN PEROXIDE	7722-84-1	TWA	1 ppm 1.4 mg/m^3	Sweden
HYDROGEN PEROXIDE	7722-84-1	STEL	2 ppm 3 mg/m3	Sweden
HYDROGEN PEROXIDE	7722-84-1	TWA	0.5 ppm 0.71 mg/m^3	Switzerland
HYDROGEN PEROXIDE	7722-84-1	STEL	0.5 ppm 0.71 mg/m^3	Switzerland
HYDROGEN PEROXIDE	7722-84-1	TWA	1 ppm 1.4 mg/m^3	UK - EH40 WEL
HYDROGEN PEROXIDE	7722-84-1	STEL	2 ppm 2.8 mg/m^3	UK - EH40 WEL
ACETIC ACID	64-19-7	TWA	10 ppm 25 mg/m^3	Austrian OEL Regulation
ACETIC ACID	64-19-7	STEL	20 ppm 50 mg/m^3	Austrian OEL Regulation

ACETIC ACID	64-19-7	TWA	10 ppm 25 mg/m^3	Belgium VLEP/GWBB
ACETIC ACID	64-19-7	STEL	15 ppm 38 mg/m^3	Belgium VLEP/GWBB
ACETIC ACID	64-19-7	TWA	10 ppm 25 mg/m^3	SCOEL
ACETIC ACID	64-19-7	TWA	10 ppm 25 mg/m^3	Denmark
ACETIC ACID	64-19-7	STEL	20 ppm 50 mg/m^3	Denmark
ACETIC ACID	64-19-7	STEL	10 ppm 25 mg/m^3	France INRS
ACETIC ACID	64-19-7	TWA	10 ppm 25 mg/m^3	Germany AGS
ACETIC ACID	64-19-7	STEL	20 ppm 50 mg/m^3	Germany AGS
ACETIC ACID	64-19-7	TWA	10 ppm 25 mg/m^3	Germany DFG
ACETIC ACID	64-19-7	STEL	20 ppm 50 mg/m^3	Germany DFG
ACETIC ACID	64-19-7	TWA	25 mg/m^3	Hungary Decree No. 25/2000 (IX.30)
ACETIC ACID	64-19-7	STEL	25 mg/m^3	Hungary Decree No. 25/2000 (IX.30)
ACETIC ACID	64-19-7	TWA	10 ppm 25 mg/m^3	Ireland
ACETIC ACID	64-19-7	STEL	15 ppm 37 mg/m^3	Ireland
ACETIC ACID	64-19-7	TWA	10 ppm 25 mg/m^3	Italy
ACETIC ACID	64-19-7	TWA	10 ppm 25 mg/m^3	Latvia
ACETIC ACID	64-19-7	TWA	15 mg/m^3	Poland - NDS
ACETIC ACID	64-19-7	STEL	30 mg/m^3	Poland - NDS
ACETIC ACID	64-19-7	TWA	10 ppm 25 mg/m^3	Spain - Royal Decree 374/2001
ACETIC ACID	64-19-7	STEL	15 ppm 37 mg/m^3	Spain - Royal Decree 374/2001
ACETIC ACID	64-19-7	TWA	5 ppm 13 mg/m^3	Sweden
ACETIC ACID	64-19-7	STEL	10 ppm 25 mg/m^3	Sweden
ACETIC ACID	64-19-7	TWA	10 ppm 25 mg/m^3	Switzerland
ACETIC ACID	64-19-7	STEL	20 ppm 50 mg/m^3	Switzerland

Biological limit values

Recommended monitoring procedures
Follow standard monitoring procedures.

Derived no-effect level (DNEL)
HYDROGEN PEROXIDE

Route	Use	Effect	Time	Value
Inhalation	Worker	Local	Short Term	3 mg/m^3
Inhalation	Worker	Systemic	Lon Term	1.4 mg/m^3
Inhalation	Consumer	Local	Short Term	1.93 mg/m^3
Inhalation	Consumer	Local	Long Term	0.21 mg/m^3

ACETIC ACID

Route	Use	Effect	Time	Value
Inhalation	Worker	Local	Short Term	25mg/m^3
Inhalation	Worker	Local	Long Term	25mg/m^3
Inhalation	Consumer	Local	Short Term	25mg/m^3
Inhalation	Consumer	Local	Long Term	25mg/m^3

Predicted no effect concentrations (PNECs)
HYDROGEN PEROXIDE

Route	Value
Freshwater	0.0126 mg/l
Freshwater sediment	0.47 mg/kg (DW)
Intermittent release	0.0138 mg/l
Marine sediment	0.47 mg/kg (DW)
Marine water	0.0126 mg/l
STP	4.66 mg/l
Soil	0.0023 mg/kg (DW)

ACETIC ACID

Route	Value
Freshwater sediment	11.36 mg/kg (DW)
Marine sediment	1.136 mg/kg (DW)
Marine	0.3058 mg/1
Freshwater	3.058 mg/1
Intermittent release	30.58 mg/1
Soil	0.478 mg/kg (DW)
Sewage treatment	85 mg/l

8.2 Exposure controls

Appropriate Engineering controls

No specific engineering measures are noted except that this product should be used in a well ventilated area.

Individual protection measures, such as personal protective equipment

In case of splashing wear suitable protective equipment.

General information

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

Respiratory equipment

Where risk assessment shows air-purifying respirators are appropriate use a respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator.

Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.6 mm
Break through time: >480 min

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.2 mm
Break through time: >35 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection

In case of splashing, wear safety goggles or face shield.

Other protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap

& water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke

Environmental exposure controls

Do not discharge into the watercourse or drains

9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance

Physical State:	Liquid
Form:	Solution
Colour:	Colourless
Odour:	Stinging

pH	ca. 0.3

9.2. Other information

Not known

10 - STABILITY AND REACTIVITY

10.1 Reactivity

Not expected under normal conditions of use

10.2 Chemical stability

Stable under normal temperature conditions

10.3 Possibility of hazardous reactions

Not expected under normal conditions of use

10.4 Conditions to avoid

Avoid exposure to high temperatures or direct sunlight

10.5 Incompatible materials

Materials to avoid -strong acids or alkalis. Oxidising agents.

10.6 Hazardous decomposition products

None, see section 5 for decomposition products under fire conditions

11 - TOXICOLOGICAL INFORMATION

General information

Information on likely routes of exposure

Inhalation

Inhalation of vapours/aerosols can lead to irritation of the respiratory tract and cause inflammation of the respiratory tract and pulmonary oedema. Symptoms may occur with delay

Skin contact

Causes caustic burns. With increasing contact length, local erythema or extreme irritation (whitening) up to blistering (caustic burn) can occur

Eye contact

Extreme irritation up to cauterisation. Can cause severe conjunctivitis, cornea damage or irreversible eye damage. Symptoms may occur with delay

Ingestion

Swallowing can lead to bleeding of the mucosa of the mouth, oesophagus and stomach. The rapid release of oxygen can cause distension and bleeding of the mucosa in the stomach and lead to severe damage of the internal organs, especially in the event of greater intake of the product

Symptoms

Harmful in contact with skin. Symptoms may include discomfort, redness, swelling. Harmful if inhaled. Symptoms may include nausea and discomfort to the upper respiratory tract. Harmful if swallowed. Symptoms may include nausea and discomfort. Burning pain and severe corrosive skin damage. Rash. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

11.1 Information on toxicological effects

Acute toxicity

PERACETIC ACID			
	Oral	LD50	1859 mg/kg (Rat) -5% Conc.
	Inhalation	LC50.	49 mg/l (Rat) Vapour
	Dermal	LD50	1147 mg/kg (Rat) 5% Conc.
HYDROGEN PEROXIDE			
	Oral	LD50 50%	>225 mg/kg (Rat)
	Inhalation	LD50 4h 50%	>0.17 mg/l (Rat)
	Dermal	LD50 70%	>6500 mg/kg (Rabbit)
	Dermal	LD50 35%	>2000 mg/kg (Rabbit)
ACETIC ACID			
	Oral	LD50	4960 mg/kg (Mouse)
	Oral	LD50	3530 mg/kg (Rat)
	Oral	LD50	3310 mg/kg
	Inhalation	LC50 4 h	>16000 ppm (Rat) Vapour
	Inhalation	LC50 1 h	5620 ppm (Mouse) Vapour
	Inhalation	LC50 1 h	277 ppm (Mouse) Vapour

Skin corrosion/irritation

PERACETIC ACID		
	OECD 404 5% Conc.	Corrosive (Rabbit)
HYDROGEN PEROXIDE		
	Rabbit 3 h 70% Conc.	Strongly Corrosive
	Rabbit 4 h 35% Conc.	Irritating
ACETIC ACID		
	OECD 404 3.3% Conc.	Slightly Irritating (Rabbit)
	OECD 404 10% Conc.	Slightly Irritating (Rabbit)

Serious eye damage/eye irritation

HYDROGEN PEROXIDE		
	Rabbit 35% Conc.	Risk of serious damage to eyes
	Rabbit 10% Conc.	Irritating
ACETIC ACID		
	OECD 405 0.1 ml 10% Conc.	Irritant (Rabbit)
	OECD 405 0.01ml 10% Conc.	Severe Irritant (Rabbit)
	EPA OPP 81-4 0.1ml 5% Conc.	Cornea opacity

Respiratory sensitisation

Based on the available data not classified as a respiratory sensitiser.

Skin sensitisation

PERACETIC ACID		
	Buehler Test	Negative (Guinea pig)
HYDROGEN PEROXIDE		
	Guinea pig	Not Sensitising

Germ cell mutagenicity

HYDROGEN PEROXIDE	
Bacterial reverse mutation assay	positive and negative (S-typhimurium /E.coli)
Chromosomal aberration mammalian cells	positive.
Genetic mutation in mammal cells-	positive.
Micronucleus test mouse intraperitoneal OECD 474	Negative

Carcinogenicity

Based on the available data not classified as a carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

HYDROGEN PEROXIDE Group 3

Reproductive toxicity

HYDROGEN PEROXIDE NOEL 90d Oral 37 mg/kg (Mouse

Target organ/effect: changes of parameters of blood, body weight development negative, irritative effect: Gastrointestinal tract.

NOEL 90 d OECD TG 408. 35% Conc. Oral 26 mg/kg (mouse)

Target organ/effect: changes of parameters of blood, body weight development negative. Irritative effect: Gastrointestinal tract.

Specific target organ toxicity - single exposure

Based on the available data classified as a STOT SE Category 3.

Specific target organ toxicity - repeated exposure

PERACETIC ACID OECD 408 90 d 5% Conc. Local irritant effect

Aspiration hazard

Based on the available data not classified as an aspiration hazard.

Mixture versus substance information

No data available

Other information

Not known

12 - ECOLOGICAL INFORMATION

12.1 Toxicity

PERACETIC ACID			
	Toxicity to fish	LC50 96 h	11 mg/l Pleuronectes platessa
		LC50 96 h	1-2 mg/l Oncorhynchus mykiss
	Toxicity to aquatic invertebrates	EC50 48 h	0.5 - 1.1 mg/l Daphnia magna
		NOEC 21 d	0.05 mg/l Daphnia magna
	Toxicity to Algae	IC50 120 h	0.18 mg/l Ps. subcapitata
	Toxicity to Bacteria	EC50 3 h	5.1 mg/l Activated sludge
HYDROGEN PEROXIDE			
	Toxicity to fish	LC50 96 h	16.4 mg/l Primephales promelas
	Toxicity to aquatic invertebrates	EC50 48 h	2.4 mg/l Daphnia pulex
		NOEC 21 d	0.63 mg/l Daphnia Magna
	Toxicity to Algae	NOEC 72 h	0.63 mg/l Skeletonema costatum
	Toxicity to Bacteria	EC50 30 min.	466 mg/l Activated sludge
		EC50 3h	>1000 mg/l Activated Sludge
ACETIC ACID			
	Toxicity to fish	LC50 96 h	>300.82 Freshwater fish
	Toxicity to aquatic invertebrates	EC50 48 h	>300.82 *Daphnia magna*
	Toxicity to Algae	EC50 72 h	>300.82
	Toxicity to Bacteria	NOEC 16 h	850 mg/l

12.2 Persistence and degradability

PERACETIC ACID	28 d	Readily biodegradable
HYDROGEN PEROXIDE		
	Photodecomposition	50% degradation 20 h
	Biodegradation	Readily biodegradable
	Log Pow	-1.57 (Calculated)
ACETIC ACID	Degradation 20 d	96%
	Phototransformation Air 26.7 d	50%
	Biodegradation in soil 2 d	50%

12.3 Bioaccumulative potential

ACETIC ACID	BCF	3.16
	Potential	Low

Partition coefficient n-octanol/water (log Kow)

PERACETIC ACID	Log Pow	-1.25 (Calculated)
ACETIC ACID	LogPow	-0.17

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

Not known

13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements

Residual waste

Dispose of waste and residues in accordance with local authority requirements

Contaminated packaging

Dispose of as unused product.

EU Waste Code

02-01-08

Disposal methods/information

Wear protective equipment as outlined in section 8 of this safety data sheet when handling this product contaminated materials and packaging.

Special precautions

Not noted.

14 - TRANSPORT INFORMATION

Road Transport Notes

14.1 UN-number

ADR/RID: 3149 IMDG: 3149 IATA: 3149

14.2 UN proper shipping name

ADR/RID:	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED
IMDG:	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED
IATA:	HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED

14.3 Transport hazard class(es)

ADR/RID: 5.1 (8) IMDG: 5.1 (8) IATA: 5.1 (8)

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

IMDG: Marine pollutant: Yes

14.6 Special precautions for users

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Further information

Limited quantities:	1L
Expected quantities:	E2
Transport Category (Tunnel Restriction Code):	2 (E)
Hazard Identification Number:	58

15 - REGULATORY INFORMATION

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

Other regulations The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

15.2 Chemical Safety Assessment

National regulations Young people under 18 years old are not allowed to work with this product according to the EU Directive 94/33/EC on the protection of young people at work. Follow national regulation for work with chemical agents.

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out.

16 - OTHER INFORMATION

List of abbreviations

CO Carbon Monoxide
NO Nitrogen Oxide
HCL Hydrochloric acid
TWA Time weighted average
STEL Short Term exposure limit
DW Dry weight

References

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

O Oxidising
C Corrosive
Xn Harmful
N Dangerous to the environment
R8 Contact with combustible material may cause fire
R10 Flammable
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed
R20/22 Harmful by inhalation and if swallowed R34
R35 Causes severe burns
R50 Very toxic to aquatic organisms
H226 Flammable liquid and vapour
H242 Heating may cause fire
H271 May cause fire or explosion; strong oxidiser
H290 May be corrosive to metals
H301 Toxic if swallowed
H302 Harmful if swallowed
H312 Harmful in contact with skin

H314 Causes severe skin burns and eye damage
H311 Toxic in contact with skin
H332 Harmful if inhaled
H335 May cause respiratory irritation
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects
H412 Harmful to aquatic life with long lasting effects
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
P234 Keep only in original container
P273 Avoid release to the environment
P280 Wear protected gloves/protective clothing/eye protection/face protection.
P302+352 IF ON SKIN: Wash with plenty of water/soap.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store Locked up.
P501 Dispose of contents/container in accordance with local regulations.
EUH071 Corrosive to the respiratory tract.

Training information Follow training instructions when handling this material.

Disclaimer

Biolink cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. The information in the sheet was written based on the best knowledge and experience currently available.