



## SAFETY DATA SHEET PERADOX

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

#### 1.1. Product identifier

Product name	PERADOX
Product number	C015 EV
Internal identification	Livestock

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

Identified uses	Peracetic Acid & Hydrogen Peroxide Disinfectant.
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#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

Evans Vanodine International  
Brierley Road  
Walton Summit  
Preston. UK. PR5 8AH  
Tel: 01772 322 200  
Fax: 01772 626 000  
qclab@evansvanodine.co.uk

#### 1.4. Emergency telephone number

Emergency telephone	New Safety Data Sheets - 8.30am to 4.45pm - 01772 322 200 - Mon to Fri. (Also available 24/7 from our website <a href="http://www.evansvanodine.co.uk">www.evansvanodine.co.uk</a> ) Technical Advice - 8.30am to 4.45pm - 01772 318 818 - Mon to Fri
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### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

Physical hazards	Ox. Liq. 3 - H272 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

#### 2.2. Label elements

##### Pictogram



Signal word

Danger

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## Hazard statements

H272 May intensify fire; oxidiser.  
 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

P102 Keep out of reach of children.  
 P261 Avoid breathing mist.  
 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.  
 P220 Keep away from combustible materials.  
 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/ 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.  
 P315 Get immediate medical advice/ attention.  
 P403+P235 Store in a well-ventilated place. Keep cool.  
 P501 Dispose of contents/ container in accordance with local regulations.

## Contains

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

## 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>HYDROGEN PEROXIDE SOLUTION ... %</b>	<b>20.0%</b>
CAS number: 7722-84-1	EC number: 231-765-0
Spec Conc Limits :- Ox. Liq. 1 (H271) >=70%, Ox. Liq. 2 (H272) >=50% <70%, Skin Corr. 1A (H314) >=70%, Skin Corr. 1B (H314) >=50% <70%, Skin Irrit. 2 (H315) >=35% <50%, STOT SE 3 (H335) >=35%, Eye Dam. 1 (H318) >=8% <50%, Eye Irrit. 2 (H319) >=5% <8%	
<b>Classification</b>	
Ox. Liq. 1 - H271	
Acute Tox. 4 - H302	
Acute Tox. 4 - H332	
Skin Corr. 1A - H314	
Eye Dam. 1 - H318	
STOT SE 3 - H335	

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<b>ACETIC ACID ...%</b>	<b>10.0%</b>
CAS number: 64-19-7	EC number: 200-580-7
Spec Conc Limits :- Skin Corr. 1A (H314) >=90%, Skin Corr. 1B (H314) >=25% <90%, Skin Irr. (H315) >=10% <25%, Eye Irr. 2 (H319) >=10% <25%	
<b>Classification</b>	
Flam. Liq. 3 - H226	
Skin Corr. 1A - H314	
Eye Dam. 1 - H318	
<b>PERACETIC ACID ...%</b>	<b>5.0%</b>
CAS number: 79-21-0	EC number: 201-186-8
M factor (Acute) = 1	M factor (Chronic) = 10
Spec Conc Limits :- STOT SE 3 (H335) >=1%	
<b>Classification</b>	
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	

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

<b>Inhalation</b>	If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
<b>Ingestion</b>	Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention immediately.
<b>Skin contact</b>	Wash with plenty of water. Get medical attention promptly if symptoms occur after washing.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Get medical attention immediately. Continue to rinse.

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

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	Irritation of nose, throat and airway. Coughing, chest tightness, feeling of chest pressure.
<b>Ingestion</b>	May cause chemical burns in mouth and throat.
<b>Skin contact</b>	Burning pain and severe corrosive skin damage. May cause serious chemical burns to the skin.

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**Eye contact** Severe irritation, burning and tearing. Prolonged contact causes serious eye and tissue damage.

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

**Notes for the doctor** Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media** Oxidising - Supports combustion. Extinguish with the following media: Water spray. Foam, carbon dioxide or dry powder.

#### 5.2. Special hazards arising from the substance or mixture

**Specific hazards** Thermal decomposition or combustion products may include the following substances: Irritating gases or vapours. If involved in fire, may decompose yielding oxygen which will support combustion. Oxidising.

#### 5.3. Advice for firefighters

**Protective actions during firefighting** Cool containers exposed to flames with water until well after the fire is out.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear protective clothing, gloves, eye and face protection. Avoid inhalation of vapours. For personal protection, see Section 8.

#### 6.2. Environmental precautions

**Environmental precautions** 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** Small Spillages: Flush away spillage with plenty of water. Large Spillages: Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely.

#### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

**Usage precautions** Wear protective clothing, gloves, eye and face protection. Avoid inhalation of vapours.

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

**Storage precautions** Keep only in the original container in a cool, well-ventilated place. Keep away from flammable and combustible materials. Protect from light.

#### 7.3. Specific end use(s)

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

**Usage description** See Product Information Sheet & Label for detailed use of this product.

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## 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/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 2 ppm 2,8 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

This product must not be handled in a confined space without adequate ventilation.

#### Eye/face protection

The following protection should be worn: Chemical splash goggles or face shield.

#### Hand protection

Wear protective gloves. Polyvinyl chloride (PVC).

#### Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

#### Respiratory protection

Respiratory protection not required.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Clear. Colourless.
Odour	Pungent. Acetic acid.
pH	pH (concentrated solution): <1.0
Melting point	-30°C
Initial boiling point and range	65°C @ 760 mm Hg
Flash point	Boils without flashing.
Relative density	1.080 @ 20°C
Solubility(ies)	Soluble in water.

### 9.2. Other information

Other information	None.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

#### Reactivity

Reacts with alkalis and generates heat. The following materials may react strongly with the product: Alkaline earth metals. Powdered metal.

### 10.2. Chemical stability

#### Stability

Inadequately vented containers may become pressurised.

### 10.3. Possibility of hazardous reactions

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**Possibility of hazardous reactions** See sections 10.1,10.4 & 10.5

### 10.4. Conditions to avoid

**Conditions to avoid** Avoid exposure to high temperatures or direct sunlight. Avoid Storage above 30°C

### 10.5. Incompatible materials

**Materials to avoid** Strong acids. Aluminium, Tin, Zinc and their alloys.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Oxygen. When heated, vapours/gases hazardous to health may be formed.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicological effects** We have not carried out any animal testing for this product. Any ATE figures quoted below are from Toxicity Classifications that have been carried out using ATE (Acute Toxicity Estimate) Calculation Method using LD50 or ATE figures provided by the Raw Material Manufacturer.

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Classification criteria has been met – Product is classified as Harmful if Swallowed.

**ATE oral (mg/kg)** 2,000.0

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Classification criteria has been met – Product is classified as Harmful in contact with skin.

**ATE dermal (mg/kg)** 1,147.0

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Classification criteria has been met – Product is classified as Harmful if Inhaled.

**ATE inhalation (gases ppm)** 18,000.0

**ATE inhalation (vapours mg/l)** 44.0

**ATE inhalation (dusts/mists mg/l)** 6.0

## SECTION 12: Ecological Information

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

### 12.1. Toxicity

**Toxicity** We have not carried out any Aquatic testing, therefore we have no Aquatic Toxicity Data specifically for this product. The Aquatic Toxicity Data, where provided by the raw material manufacturer for ingredients with aquatic toxicity, can be made available on request.

### 12.2. Persistence and degradability

**Persistence and degradability** This product, at use dilutions, is readily broken down in biological effluent treatment plants.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** The product does not contain any substances expected to be bioaccumulating.

### 12.4. Mobility in soil

**Mobility** Not known.

### 12.5. Results of PBT and vPvB assessment

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**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

## 12.6. Other adverse effects

**Other adverse effects** Not known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal methods** Discharge used solutions to drain. Small amounts (less than 5 Litres) of unwanted product may be flushed with water to sewer. Larger volumes must be sent for disposal as special waste. Rinse out empty container with water and consign to normal waste.

## SECTION 14: Transport information

### 14.1. UN number

**UN No. (ADR/RID)** 3149

**UN No. (IMDG)** 3149

**UN No. (ICAO)** 3149

### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED

**Proper shipping name (IMDG)** HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED

**Proper shipping name (ICAO)** HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED

### 14.3. Transport hazard class(es)

**ADR/RID class** Division 5.1: Oxidizing substances.

**ADR/RID subsidiary risk** Class 8: Corrosive substances.

**ADR/RID label** 5.1 & 8

**IMDG class** Division 5.1: Oxidizing substances.

**IMDG subsidiary risk** Class 8: Corrosive substances.

**ICAO class/division** Division 5.1: Oxidizing substances.

**ICAO subsidiary risk** Class 8: Corrosive substances.

### **Transport labels**



### 14.4. Packing group

**ADR/RID packing group** II

**IMDG packing group** II

**ICAO packing group** II

### 14.5. Environmental hazards

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Environmentally hazardous substance/marine pollutant



## 14.6. Special precautions for user

EmS F-H, S-Q

Tunnel restriction code (E)

## 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 relevant. for a packaged product.

Not relevant. for a packaged product.

## SECTION 15: Regulatory information

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

**EU legislation** Safety Data Sheet prepared in accordance with REACH Commission Regulation (EU) No 2015/830 (which amends Regulation (EC) No 453/2010 & 1907/2006).  
The product is as classified under GHS/CLP- Regulation (EC) No 1272/2008 classification, labelling & packaging of substances & mixtures.  
Ingredients are listed with classification under GHS/CLP - Regulation (EC) No 1272/2008 classification, labelling & packaging of substances & mixtures.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out as not applicable as this product is a mixture.

## SECTION 16: Other information

**Abbreviations and acronyms used in the safety data sheet**

PBT: Persistent, Bioaccumulative and Toxic substance.  
vPvB: Very Persistent and Very Bioaccumulative.  
ATE: Acute Toxicity Estimate.  
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
IMDG: International Maritime Dangerous Goods.  
ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.  
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.  
GHS: Globally Harmonized System.  
Spec Conc Limits = Specific Concentration Limits.

**Classification abbreviations and acronyms**

Acute Tox. = Acute toxicity  
Aquatic Acute = Hazardous to the aquatic environment (acute)  
Aquatic Chronic = Hazardous to the aquatic environment (chronic)  
Eye Dam. = Serious eye damage  
Eye Irrit. = Eye irritation  
Flam. Liq. = Flammable liquid  
Met. Corr. = Corrosive to metals  
Ox. Liq. = Oxidising liquid  
Org. Perox. = Organic peroxide  
Skin Corr. = Skin corrosion  
Skin Irrit. = Skin irritation  
STOT SE = Specific target organ toxicity-single exposure



## PERADOX

<b>Key literature references and sources for data</b>	Material Safety Data Sheet, Miscellaneous manufacturers. CLP Class - Table 3.1 List of harmonised classification and labeling of hazardous substances. ECHA - C&L Inventory database.
<b>Classification procedures according to Regulation (EC) 1272/2008</b>	Calculation Method.
<b>Revision comments</b>	Safety Data Sheet amended in accordance with REACH Commission Regulation (EU) No 2015/830 amendment. (Changes to Sections 2,3,15&16)
<b>Revision date</b>	17/11/2017
<b>Revision</b>	10
<b>SDS status</b>	The Hazard Statements listed below in this Section No 16 relate to the Raw Materials (Ingredients) in the Product (as listed in Section 3) and NOT the product itself. For the Hazard Statements relating to this Product see Section 2.
<b>Hazard statements in full</b>	H226 Flammable liquid and vapour. H242 Heating may cause a fire. H271 May cause fire or explosion; strong oxidiser. 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. 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.