

SAFETY DATA SHEET VANODOX FORMULA

SECTION 1: Identification of the	he substance/mixture and of the company/underta	aking
1.1. Product identifier		
Product name	VANODOX FORMULA	
Product number	R047 EV	
Internal identification	Livestock	
UFI	UFI: 17T2-1GHD-HU4Q-HXWG	
1.2. Relevant identified uses of	of the substance or mixture and uses advised agai	inst
Identified uses	Peracetic Acid based Liquid disinfectant.	
1.3. Details of the supplier of t	he safety data sheet	
Supplier	UK Supplier: Evans Vanodine International plc Brierley Road, Walton Summit, Preston. UK. PR5 8AH Tel: 01772 322 200 e-mail: productcompliance@evansvanodine.co.	EU Supplier: Evans Vanodine Europe 6-9 Trinity Street, Dublin 2. D02 EY47. Republic of Ireland. uk
1.4. Emergency telephone nu	mber	
Emergency telephone	New Safety Data Sheets - 01772 322 200 - Mor 1.30pm (Also available 24/7 from our website w Advice about this SDS - 01772 318 818 - Mon to 1.30pm	ww.evansvanodine.co.uk) For Technical
National emergency telephone number	For Health Care Professionals only - For use in UK: Contact the National Poisons Inf For use in the Republic of Ireland: To report a p Poisons Information Centre, Beaumont Hospital For use in Malta: Emergency services (Ambular)	oisoning incident contact The National I, Dublin (01-8092166)
SECTION 2: Hazards identification		
2.1. Classification of the substance or mixture		
Classification (SI 2019 No. 72	<u>0)</u>	
Physical hazards	Ox. Liq. 3 - H272 Met. Corr. 1 - H290	
Health hazards	Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute 1 - H318 STOT SE 3 - H335	Tox. 4 - H332 Skin Corr. 1A - H314 Eye Dam.
Environmental hazards	Aquatic Chronic 1 - H410	

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2.2. Label elements

Hazard pictograms





Signal word	Danger
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 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. 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.
Supplemental label information	EUH071 Corrosive to the respiratory tract.
Contains	HYDROGEN PEROXIDE SOLUTION %, ACETIC ACID%, PERACETIC ACID%

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. Including - Endocrine disrupting properties: None known.

SECTION 3: Composition/information on ingredients		
3.2. Mixtures		
HYDROGEN PEROXIDE SOLUT	'ION %	20-25%
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%		
Classification		
Ox. Liq. 1 - H271		
Acute Tox. 4 - H302		
Acute Tox. 4 - H332		
Skin Corr. 1A - H314		
Eye Dam. 1 - H318		
STOT SE 3 - H335		
Aquatic Chronic 3 - H412		

ACETIC ACID ...%

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%

Classification

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

PERACETIC ACID ...%

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%

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

ALCOHOL (C9-11) ETHOXYLATE (8EO)

CAS number: 68439-46-3

Alternative CAS Nos 160875-66-1, 68439-45-2

Classification

Acute Tox. 4 - H302 Eye Dam. 1 - H318

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

SECTION 4: First aid I	measures
4.1. Description of first aid measures	
Inhalation	Unlikely route of exposure as the product does not contain volatile substances. 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.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention immediately.
Skin contact	Wash with plenty of water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Get medical attention immediately. Continue to rinse.

10-15%

5-10%

1-3%

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Irritation of nose, throat and airway. Coughing, chest tightness, feeling of chest pressure.
Ingestion	May cause chemical burns in mouth and throat.
Skin contact	Burning pain and severe corrosive skin damage. May cause serious chemical burns to the skin.
Eye contact	Severe irritation, burning and tearing. Prolonged contact causes serious eye and tissue damage.
4.3. Indication of any immedia	te medical attention and special treatment needed
Notes for the doctor	Treat symptomatically.
SECTION 5: Firefighting meas	ures
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 fro	om the substance or mixture
Specific hazards	Oxidising. The product increases the risk of fire and may accelerate combustion. Thermal decomposition or combustion products may include the following substances: Irritating gases or vapours.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Keep containers cool by spraying with water to reduce explosion risks. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
SECTION 6: Accidental releas	e measures
6.1. Personal precautions, pro	tective equipment and emergency procedures
Personal precautions	Wear protective clothing, gloves, eye and face protection. Avoid inhalation of vapours.
6.2. Environmental precaution	<u>S</u>
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 section	
Reference to other sections	For personal protection, see Section 8.
SECTION 7: Handling and sto	rage
7.1. Precautions for safe hand	ling
Usage precautions	Wear protective clothing, gloves, eye and face protection.
7.2 Conditions for safe stores	e including any incompatibilities

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Keep only in the original container in a cool, well-ventilated place. Protect from light. Store away from the following materials: Flammable/combustible materials. Alkalis. & Common metals.
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.

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 WEL = Workplace Exposure Limit.

8.2. Exposure controls

Protective equipment

Vapour density



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 che	mical properties	
9.1. Information on basic physical and chemical properties		
Appearance	Liquid.	
Colour	Clear. Colourless.	
Odour	Acetic acid.	
рН	pH (concentrated solution): 1.40	
Melting point	-28°C	
Initial boiling point and range	Technically not feasible.	
Flash point	Technically not feasible.	
Flammability (solid, gas)	Not applicable.	
Upper/lower flammability or explosive limits	Not applicable.	
Vapour pressure	Not available.	

Not available.

Relative density	1.100 @ 20°C
Solubility(ies)	Soluble in water.
Partition coefficient	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	>=60°C Self-Accelerating decomposition temperature (SADT).
Viscosity	Not available.
9.2. Other information	
Other information	None.
Particle size	Not applicable.
SECTION 10: Stability and re	activity
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
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. Keep at temperature not exceeding 30°C.
10.5. Incompatible materials	
Materials to avoid	Strong acids. Aluminium, Tin, Zinc and their alloys.
10.6. Hazardous decompositi	on products
Hazardous decomposition products	Oxygen. When heated, vapours/gases hazardous to health may be formed.
SECTION 11: Toxicological in	formation
11.1. Information on toxicolog	ical 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 LD₅₀)	Classification criteria has been met – Product is classified as Harmful if Swallowed.
ATE oral (mg/kg)	1,291.24
Acute toxicity - dermal Notes (dermal LD₅₀)	Classification criteria has been met – Product is classified as Harmful in contact with skin.
ATE dermal (mg/kg)	1,100.0
Acute toxicity - inhalation Notes (inhalation LC_{50})	Classification criteria has been met – Product is classified as Harmful if Inhaled.
	0/40

ATE inhalation (vapours mg/l)	11.0
Skin corrosion/irritation	
Skin corrosion/irritation	Causes severe burns.
Serious eye damage/irritation Serious eye damage/irritation	Causes serious eye damage.
Respiratory sensitisation Summary	Not applicable.
Skin sensitisation Summary	Not applicable.
Germ cell mutagenicity Summary	Not applicable.
Carcinogenicity Summary	Not applicable.
Reproductive toxicity Summary	Not applicable.
Specific target organ toxicity -	single exposure
STOT - single exposure	May cause respiratory irritation.
Target organs	Respiratory system, lungs
Specific target organ toxicity -	
Summary	Not applicable.
Aspiration hazard Summary	Not applicable.
11.2 Information on other Hazards 11.2.1 Endocrine disrupting properties	None known.
SECTION 12: Ecological inform	nation
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 degrada	ability
Persistence and degradability	This product, at use dilutions, is readily broken down in biological effluent treatment plants.
12.3. Bioaccumulative potentia	
Bioaccumulative potential	The product does not contain any substances expected to be bioaccumulating.
Partition coefficient	Not applicable.
12.4. Mobility in soil	
Mobility	Not known.

12.5. Results of PBT and vPvB	assessment
Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.
12.6 Endocrine disrupting properties	None known.
12.6. Other adverse effects	
Other adverse effects	Now section 12.7: None known.
SECTION 13: Disposal conside	erations
13.1. Waste treatment method	<u>S</u>
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 inform	nation
14.1. UN number	
UN No. (ADR/RID)	3149
UN No. (IMDG)	3149
UN No. (ICAO)	3149
14.2. UN proper shipping name	9
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(e	<u>s)</u>
ADR/RID class	Division 5.1: Oxidising substances.
ADR/RID subsidiary risk	Class 8: Corrosive substances.
ADR/RID label	5.1 & 8
IMDG class	Division 5.1: Oxidising substances.
IMDG subsidiary risk	Class 8: Corrosive substances.
ICAO class/division	Division 5.1: Oxidising substances.
ICAO subsidiary risk	Class 8: Corrosive substances.
Transport labels	
14.4. Packing group	
ADR/RID packing group	П
IMDG packing group	II
ICAO packing group	II

14.5. Environmental hazards

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 Not relevant. for a packaged product. Annex II of MARPOL 73/78 and the IBC Code

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 EU Regulation: "REACH Commission Regulation (EU) No 2020/878 (which amends Regulation (EC) No 2015/830, 453/2010 & 1907/2006)." and UK Regulation: "SI 2020 No. 1577 - The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020". The product is as classified under - EU GHS: CLP - "Regulation (EC) No 1272/2008 classification, labelling & packaging of substances & mixtures." and UK GHS: "SI 2020 No. 1567 - The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020.". Ingredients are listed with classification under - EU GHS: CLP - "Regulation (EC) No 1272/2008 classification, labelling & packaging of substances & mixtures." and UK GHS: "SI 2020 No. 1567 - The Chemicals (Health and Safety) and Genetically Modified Organisms
	2020 No. 1567 - The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020.".

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	PBT: Persistent, Bioaccumulative and Toxic substance.
used in the safety data sheet	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: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
	REACH: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577.
	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 Org. Perox. = Organic peroxide Ox. Liq. = Oxidising liquid Met. Corr. = Corrosive to metals Skin Corr. = Skin corrosion Skin Irrit. = Skin irritation STOT SE = Specific target organ toxicity-single exposure
Key literature references and sources for data	Material Safety Data Sheet, Miscellaneous manufacturers. CLP Class - Table 3.1 List of harmonised classification and labelling of hazardous substances. ECHA - C&L Inventory database.
Classification procedures according to SI 2019 No. 720	Calculation Method.
Revision comments	New Format Safety Data Sheet prepared in accordance with REACH Commission Regulation (EU) No 2020/878 (which amends Regulation (EC) No 453/2010 & 1907/2006) No change in Product Classification. (Changes made to sections 2,3,9,11,12,15+16)
Revision date	18/11/2022
Revision	8
SDS status	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.
Hazard statements in full	 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. H412 Harmful to aquatic life with long lasting effects.