SAFETY DATA SHEET
FORMALDEHYDE LIQUID

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

1.1. Product identifier

Product name FORMALDEHYDE LIQUID

Product number R045 EV

Internal identification Livestock

UFI UFI: R2T2-1G4K-WU4R-68RG

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

Identified uses Source of Formaldehyde.

1.3. Details of the supplier of the 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.uk

EU Supplier:
Evans Vanodine Europe
6-9 Trinity Street, Dublin 2.
D02 EY47.
Republic of Ireland.

1.4. Emergency telephone number

Emergency telephone New Safety Data Sheets - 01772 322 200 - Mon to Thur. 8.30am to 4.30pm - Fri 8.30am to 1.30pm (Also available 24/7 from our website www.evansvanodine.co.uk) For Technical Advice about this SDS - 01772 318 818 - Mon to Thur 8.30am to 4.45pm - Fri 8.30am to 1.30pm

National emergency telephone number For Health Care Professionals only -
For use in UK: Contact the National Poisons Information Service for further advice.
For use in the Republic of Ireland: To report a poisoning incident contact The National Poisons Information Centre, Beaumont Hospital, Dublin (01-8092166). .
For use in Malta: Emergency services (Ambulance, Fire and Rescue, Police) : 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Not Classified

Health hazards Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 2 - H330 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 1B - H350 STOT SE 2 - H371 STOT SE 3 - H335

Environmental hazards Not Classified

2.2. Label elements

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Hazard pictograms

Signal word	Danger
Hazard statements	H301+H311 Toxic if swallowed or in contact with skin. H330 Fatal if inhaled. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H341 Suspected of causing genetic defects. H350 May cause cancer. H371 May cause damage to organs . H335 May cause respiratory irritation.
Precautionary statements	P102 Keep out of reach of children. P261 Avoid breathing vapour/ spray. P271 Use only outdoors or in a well-ventilated area. P284 [In case of inadequate ventilation] wear respiratory protection. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P270 Do not eat, drink or smoke when using this product. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P315 Get immediate medical advice/ attention. 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. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of contents/ container in accordance with local regulations.
Contains	FORMALDEHYDE ...%

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

FORMALDEHYDE LIQUID

FORMALDEHYDE ...% **30-60%**

CAS number: 50-00-0 EC number: 200-001-8

Spec Conc Limits :- Skin Corr. 1B (H314) >=25%, Skin Irrit. 2 (H315) >=5% < 25%, Eye Irrit. 2 (H319) >=5% < 25%, STOT SE 3 (H335) =5%, Skin Sens. 1 (H317) >=0.2%

Classification
Acute Tox. 3 - H301
Acute Tox. 3 - H311
Acute Tox. 2 - H330
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Skin Sens. 1 - H317
Muta. 2 - H341
Carc. 1B - H350
STOT SE 3 - H335

METHANOL **5-10%**

CAS number: 67-56-1 EC number: 200-659-6

Spec Conc Limits :- STOT SE 1 (H370) >=10%, STOT SE 2 (H371) >3% <10%

Classification
Flam. Liq. 2 - H225
Acute Tox. 3 - H301
Acute Tox. 3 - H311
Acute Tox. 3 - H331
STOT SE 1 - H370

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 Move affected person to fresh air at once. Rinse nose and mouth with water. Keep affected person warm and at rest. Get medical attention immediately.

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. Continue to rinse. Get medical attention immediately.

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 Fatal if inhaled. Upper respiratory irritation. Coughing, chest tightness, feeling of chest pressure.

Ingestion May cause chemical burns in mouth and throat. May cause liver and/or renal damage.

Skin contact 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 The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.

5.3. Advice for firefighters

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. Wear respiratory protection. 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. Wear Respiratory protection compliant with EN 141 (A2 B2 E2 K2 Hg-p3).

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep only in the original container in a cool, well-ventilated place. Store away from the following materials: Oxidising materials. Acids. Alkalis. Organic solvents. & Common metals.

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

FORMALDEHYDE ...%

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Long-term exposure limit (8-hour TWA): WEL 2 ppm 2,5 mg/m³
Short-term exposure limit (15-minute): WEL 2 ppm 2,5 mg/m³

METHANOL

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³
Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³
Sk

WEL = Workplace Exposure Limit.
Sk = Can be absorbed through skin.

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	Provide adequate general and local exhaust 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	Wear Respiratory protection compliant with EN 141 (A2 B2 E2 K2 Hg-p3).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Clear. Colourless.
Odour	Pungent. Characteristic of formaldehyde.
pH	pH (concentrated solution): 2.5 - 5.5
Melting point	-15°C
Initial boiling point and range	96 - 101°C @ 760 mm Hg
Flash point	63 -75°C . Measured using test method, Closed cup.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	1.080 - 1.160 @ 20°C
Solubility(ies)	Soluble in water.
Partition coefficient	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not applicable.
Viscosity	Not available.

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9.2. Other information

Other information None.

Particle size Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react strongly with the product: Strong acids. Strong alkalis. Organic compounds. Some metals.

10.2. Chemical stability

Stability No particular stability concerns.

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 storage below 30°C and above 60°C otherwise may polymerise. Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid Strong acids. Strong oxides.

10.6. Hazardous decomposition products

Hazardous decomposition products Formaldehyde gas can be evolved at high temperatures and can form explosive mixtures.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects We have not carried out any animal testing, therefore we have no Toxicological Data specifically for this product. The Toxicological Data, where provided by the raw material manufacturer, can be made available on request.

Acute toxicity - oral

Notes (oral LD_{50}) Classification criteria has been met – Product is classified as Toxic if Swallowed.

ATE oral (mg/kg) 200.11

Acute toxicity - dermal

Notes (dermal LD_{50}) Classification criteria has been met – Product is classified as Toxic in contact with skin.

ATE dermal (mg/kg) 645.23

Acute toxicity - inhalation

Notes (inhalation LC_{50}) Classification criteria has been met – Product is classified as Fatal if Inhaled.

ATE inhalation (gases ppm) 277.78

ATE inhalation (vapours mg/l) 1.33

ATE inhalation (dusts/mists mg/l) 0.14

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

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Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye damage.

Respiratory sensitisation

Summary	Not applicable.

Skin sensitisation

Summary	Not applicable.
Skin sensitisation	May cause an allergic skin reaction.

Germ cell mutagenicity

Summary	Not applicable.

Carcinogenicity

Carcinogenicity	May cause cancer.

Reproductive toxicity

Reproductive toxicity - development	Suspected of causing genetic defects.

Specific target organ toxicity - single exposure

STOT - single exposure	May cause respiratory irritation. May cause damage to organs .
Target organs	Respiratory system, lungs

Specific target organ toxicity - repeated exposure

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 information

Ecotoxicity	Formaldehyde exhibits a toxic effect on aquatic organisms, but is not officially classified as such. Not acutely toxic to vertebrate animals, but exerts activity against invertebrates, e.g. bacteria. Sludge decomposition can be impaired, but the inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

12.1. Toxicity

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.
Partition coefficient	Not applicable.

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 Endocrine disrupting properties None known.

12.6. Other adverse effects

Other adverse effects Now section 12.7: None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Discharge used solutions to drain. Unwanted material should be disposed of as hazardous waste by registered contractor. Rinse out empty container with water and consign to normal waste.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 2209

UN No. (IMDG) 2209

UN No. (ICAO) 2209

14.2. UN proper shipping name

Proper shipping name (ADR/RID) FORMALDEHYDE SOLUTION

Proper shipping name (IMDG) FORMALDEHYDE SOLUTION

Proper shipping name (ICAO) FORMALDEHYDE SOLUTION

14.3. Transport hazard class(es)

ADR/RID class Class 8: Corrosive substances.

ADR/RID label 8

IMDG class Class 8: Corrosive substances.

ICAO class/division Class 8: Corrosive substances.

Transport labels

14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

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EmS	F-A, S-B
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.

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 (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 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: 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 Carc. = Carcinogenicity Eye Dam. = Serious eye damage Flam. Liq. = Flammable liquid Muta. = Germ cell mutagenicity 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.

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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	10/12/2022
Revision	9
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	H225 Highly flammable liquid and vapour. H301 Toxic if swallowed. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H330 Fatal if inhaled. H331 Toxic if inhaled. H335 May cause respiratory irritation. H341 Suspected of causing genetic defects. H350 May cause cancer. H370 Causes damage to organs . H371 May cause damage to organs .