# SAFETY DATA SHEET
# ROBO ALKALI

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

### 1.1. Product identifier

**Product name** ROBO ALKALI

**Product number** R102 EV

**Internal identification** Livestock

**UFI** UFI: 7DT2-1GW6-4U4Q-UHEY

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

**Identified uses** Alkaline Circulation Cleaner for use with Robotic Milking Equipment.

### 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 (EC 1272/2008)**

**Physical hazards** Not Classified

**Health hazards** Skin Corr. 1A - H314 Eye Dam. 1 - H318

**Environmental hazards** Not Classified

### 2.2. Label elements

**Hazard pictograms**

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| | |
|---|---|
| **Signal word** | Danger |
| **Hazard statements** | H314 Causes severe skin burns and eye damage. |
| **Precautionary statements** | P102 Keep out of reach of children.<br>P260 Do not breathe mist.<br>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.<br>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.<br>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.<br>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P315 Get immediate medical advice/ attention.<br>P501 Dispose of contents/ container in accordance with local regulations. |
| **Contains** | SODIUM HYDROXIDE |

### 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

**SODIUM HYDROXIDE** **25-30%**

CAS number: 1310-73-2 EC number: 215-185-5 REACH registration number: 01-2119457892-27-xxxx

Spec Conc Limits :- Skin Corr. 1A (H314) >= 5 %, Skin Corr. 1B (H314) >=2% <5 %, Skin Irrit. 2 (H315) >=0.5%<2%, Eye Irrit. 2 (H319) >=0.5% <2%

**Classification**
Met. Corr. 1 - H290
Skin Corr. 1A - H314
Eye Dam. 1 - H318

**TETRA SODIUM ETHYLENE DIAMINE TETRA ACETATE** **1-3%**

CAS number: 64-02-8 EC number: 200-573-9

**Classification**
Acute Tox. 4 - H302
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
STOT RE 2 - H373

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** 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.

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**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** Irritation of nose, throat and airway.

**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 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: Irritating 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. 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

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**Usage precautions** Wear protective clothing, gloves, eye and face protection.

### 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.

### 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**

**SODIUM HYDROXIDE**

Short-term exposure limit (15-minute): WEL 2 mg/m³
WEL = Workplace Exposure Limit.

### 8.2. Exposure controls

**Protective equipment**

**Appropriate engineering controls** Not relevant.

**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** Faint surfactant

**pH** pH (diluted solution): 13.00 @ 1% w/w

**Melting point** -4°C

**Initial boiling point and range** 103°C @ 760 mm Hg

**Flash point** Boils without flashing.

**Relative density** 1.360 @ 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** Reactions with the following materials may generate heat: Strong acids.

### 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** There are no known conditions that are likely to result in a hazardous situation.

### 10.5. Incompatible materials

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

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** No known hazardous decomposition products.

## 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 $LD_{50}$)** Based on available data the classification criteria are not met.

**ATE oral (mg/kg)** 123,611.11

**Acute toxicity - inhalation**

**Notes (inhalation $LC_{50}$)** Based on available data the classification criteria are not met.

**ATE inhalation (dusts/mists mg/l)** 104.17

## SECTION 12: Ecological information

**Ecotoxicity** Potentially hazardous due to the alkalinity of the product.

### 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** Sequestrant is readily degraded during biological effluent treatment processes.

### 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.

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### 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. 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)** 1719

**UN No. (IMDG)** 1719

**UN No. (ICAO)** 1719

### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** CAUSTIC ALKALI LIQUID, N.O.S. (sodium hydroxide solution)

**Proper shipping name (IMDG)** CAUSTIC ALKALI LIQUID, N.O.S. (sodium hydroxide solution)

**Proper shipping name (ICAO)** CAUSTIC ALKALI LIQUID, N.O.S. (sodium hydroxide 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** II

**IMDG packing group** II

**ICAO packing group** II

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**
No.

### 14.6. Special precautions for user

**EmS** F-A, S-B

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**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 2015/830 (which amends Regulation (EC) No 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: 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
Eye Dam. = Serious eye damage
Eye Irrit. = Eye irritation
Met. Corr. = Corrosive to metals
Skin Corr. = Skin corrosion
Skin Irrit. = Skin irritation

**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 Regulation (EC) 1272/2008** Calculation Method.

**Revision comments** New product.

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| | |
|---|---|
| **Revision date** | 25/11/2021 |
| **Revision** | 1 |
| **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** | H290 May be corrosive to metals.<br>H302 Harmful if swallowed.<br>H314 Causes severe skin burns and eye damage.<br>H315 Causes skin irritation.<br>H318 Causes serious eye damage.<br>H332 Harmful if inhaled.<br>H373 May cause damage to organs through prolonged or repeated exposure if inhaled. |