SDS conforms with EU Regulation: "REACH Commission Regulation (EU) No 2020/878 (which amends (EC) No 2015/830, 453/2010 & 1907/2006)" and UK Regulation: "SI 2020 No. 1577 - The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020".



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 R1029 EV
Internal identification Livestock

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: EU Supplier:

Evans Vanodine International plc, Evans Vanodine Europe (FR), Brierley Road, 3 Boulevard de Belfort, 1st Floor,

Walton Summit, Lille, 59000, France.

Preston, PR5 8AH, UK. Tel: +33 (0)3 76 04 21 87.

Tel: 01772 322 200.

e-mail: productcompliance@evansvanodine.co.uk

1.4. Emergency telephone number

Emergency telephone New Safety Data Sheets - 01772 322 200 - Mon to Thurs 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 Thurs 8.00am to 5.30pm

National emergency For Health Care Professionals only

Telephone number 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 – 8am to 10pm every day). 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 (EU: 1272/2008 & UK: SI 2020/1567 which amends SI 2019 No. 720)

Physical hazards Not Classified

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

Environmental hazards Not Classified

2.2. Label elementsHazard pictograms



Signal word Danger

ROBO ALKALI

Hazard statements H314 Causes severe skin burns and eye damage.

Precautionary statements P102 Keep out of reach of children.

P260 Do not breathe mist.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. 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.

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. Including - Endocrine disrupting properties: None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

SODIUM HYDROXIDE 25-30%

CAS number: 1310-73-2 EC number: 215-185-5

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

AMINO TRIMETHYLENE PHOSPHONIC ACID PENTA SODIUM SALT

CAS number: 2235-43-0 EC number: 218-791-8

Classification

Skin Irrit. 2 - H315 Eye Dam. 1 - H318

The Full Text for all 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

0.1-1%

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. Continue to rinse. Get medical attention immediately.

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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

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

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.

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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 (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.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or

explosive limits

Not applicable.

Vapour pressure Not available.

Vapour density Not available.

Relative density Density=1.305 @20°C

Solubility(ies) Soluble in water.

Partition coefficient Not applicable.

Auto-ignition temperature Not applicable.

Decomposition Temperature Not applicable.

Viscosity Not available.

9.2. Other information

Other information None.

Particle size Not applicable.

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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

See sections 10.1,10.4 & 10.5

reactions

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

No known hazardous decomposition products.

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

Summary Not applicable.

Acute toxicity - dermal

Summary Not applicable.

Acute toxicity - inhalation

Summary Not applicable.

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.

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Specific target organ toxicity - single exposure

Summary Not applicable.

Specific target organ toxicity - repeated exposure

Summary Not applicable.

Aspiration hazard

Summary Not applicable.

11.2. Information on other Hazards None known.11.2.1. Endocrine disrupting properties None known.

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.

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.

12.7. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment 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.

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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

14.6. Special precautions for user

EmS F-A, S-B

Tunnel restriction code (E)

14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk according to Not relevant for a packaged product.

Annex II of MARPOL and the IBC Code

ROBO ALKALI

SECTION 15: Regulatory information

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

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." (which amends SI 2019 No.720).

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." (which amends SI 2019 No.720).

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

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 Calculation Method.

New Evans Logo & EU Address - No change in Product Classification. Revision comments

(Changes made to sections 1+16)

Revision date 01/10/2024

Revision

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.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.