SAFETY DATA SHEET
METRON

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

1.1. Product identifier

Product name	METRON
Product number	R054 EV
Internal identification	Livestock
UFI	UFI: TFWG-516C-HG0T-7403

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

Identified uses	Alkaline & Chlorine based Powdered Cleaner for milk pipelines and parlours.

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	For Health Care Professionals only 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). . 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	Skin Corr. 1A - H314 Eye Dam. 1 - H318 STOT SE 3 - H335
Environmental hazards	Aquatic Chronic 2 - H411

2.2. Label elements

Hazard pictograms

Signal word Danger

Hazard statements	H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P102 Keep out of reach of children. P260 Do not breathe dust. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P235+P410 Keep cool. Protect from sunlight. 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. P402+P404 Store in a dry place. Store in a closed container. P501 Dispose of contents/ container in accordance with local regulations.
Supplemental label information	EUH031 Contact with acids liberates toxic gas.
Contains	SODIUM HYDROXIDE, DISODIUM METASILICATE, TROCLOSENE SODIUM, DIHYDRATE (Sodium Dichloroisocyanurate Dihydrate)

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	
DISODIUM METASILICATE	25-30%
CAS number: 6834-92-0 EC number: 229-912-9	
Classification Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335	

SODIUM CARBONATE CAS number: 497-19-8 EC number: 207-838-8	30-40%
Classification Eye Irrit. 2 - H319	
TROCLOSENE SODIUM, DIHYDRATE (Sodium Dichloroisocyanurate Dihydrate) CAS number: 51580-86-0 EC number: 220-767-7 M factor (Acute) = 1 M factor (Chronic) = 1	5-10%
Classification Acute Tox. 4 - H302 Eye Irrit. 2 - H319 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

Inhalation	Get medical attention if any discomfort continues. Move affected person to fresh air at once.
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.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid inhalation of dust. 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: Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into 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 dust. Never add water directly to this product as it may cause a vigorous reaction or boiling. Always dilute by carefully pouring the product into water. Contact with acids liberates toxic gas.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store away from the following 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

SODIUM CARBONATE

Long-term exposure limit (8-hour TWA): WEL 5 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	Powder.
Colour	White.
Odour	Faint Chlorine.
pH	pH (diluted solution): 12.00 @ 150g / 40 Litres
Melting point	Not applicable.
Initial boiling point and range	Not applicable.
Flash point	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	Not applicable.
Solubility(ies)	Soluble in water.
Partition coefficient	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not applicable.
Viscosity	Not applicable.

9.2. Other information

Other information	None.
Particle size	Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Reacts violently with strong acids. Generates toxic gas in contact with acid. The product reacts with water and will generate heat. The product will harden into a solid mass in contact with water and moisture.

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	The product will harden into a solid mass in contact with water and moisture.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Hazardous decomposition	Toxic chlorine gas can be released if heated. 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)	9,187.5

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 - 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 chlorinated alkaline nature 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	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

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. 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)	3262
UN No. (IMDG)	3262
UN No. (ICAO)	3262

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (sodium hydroxide, solid and troclosene sodium, dihydrate)
Proper shipping name (IMDG)	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (sodium hydroxide, solid and troclosene sodium, dihydrate)
Proper shipping name (ICAO)	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (sodium hydroxide, solid and troclosene sodium, dihydrate)

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. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to product. Annex II of MARPOL 73/78 and the IBC Code: Not relevant. for a packaged

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 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 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	Slight amends to section 3. (Changes made to sections 3+16)
Revision date	18/08/2023
Revision	13
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. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.