SAFETY DATA SHEET
DAIRY HYPOCHLORITE

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

1.1. Product identifier

Product name          DAIRY HYPOCHLORITE
Product number        R064 EV
Internal identification P.V6

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

Identified uses       Chlorine based Disinfectant for milk pipelines and parlours.

1.3. Details of the supplier of the safety data sheet

Supplier              Evans Vanodine International
                      Brierley Road
                      Walton Summit
                      Preston. PR5 8AH

Tel: 01772 322 200
Fax: 01772 626 000
qclab@evansvanodine.co.uk

1.4. Emergency telephone number

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification
Physical hazards
Not Classified

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

Environmental hazards
Aquatic Acute 1 - H400

Classification (67/548/EEC or 1999/45/EC)
C;R34. N;R50. R31.

2.2. Label elements

Pictogram

Signal word          Danger

Hazard statements
DAIRY HYPOCHLORITE

H314 Causes severe skin burns and eye damage.
H400 Very toxic to aquatic life.

Precautionary statements

P102 Keep out of reach of children.
P260 Do not breathe mist.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P235+P410 Keep cool. Protect from sunlight.
P301+P330+P311 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/shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P333 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.

Supplemental label information

EUH031 Contact with acids liberates toxic gas.

Contains

SODIUM HYPOCHLORITE SOLUTION, ... % Cl ACTIVE

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

<table>
<thead>
<tr>
<th>SODIUM HYPOCHLORITE SOLUTION, ... % CI ACTIVE</th>
<th>10-15%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 7681-52-9</td>
<td>EC number: 231-668-3</td>
</tr>
<tr>
<td>M factor (Acute) = 10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification</th>
<th>Classification (67/548/EEC or 1999/45/EC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corr. 1B - H314</td>
<td>C;R34 R31 N;R50</td>
</tr>
<tr>
<td>Eye Dam. 1 - H318</td>
<td></td>
</tr>
<tr>
<td>Aquatic Acute 1 - H400</td>
<td></td>
</tr>
</tbody>
</table>

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

Unlike 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.

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
DAIRY HYPOCHLORITE

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**
This product is dangerous for the environment: 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. Keep container tightly closed. Protect from sunlight. Store away from the following materials: Acids.

#### 7.3. Specific end use(s)
DAIRY HYPOCHLORITE

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

Ingredient comments
No exposure limits known for ingredient(s).

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. Pale Yellow.

Odour
Characteristic Hypochlorite

pH
pH (concentrated solution): 12.4

Melting point
-2°C

Initial boiling point and range
102°C @ 760 mm Hg

Flash point
Boils without flashing.

Relative density
1.160 @ 20°C

Solubility(ies)
Soluble in water.

9.2. Other information
DAIRY HYPOCHLORITE

SECTION 10: Stability and reactivity

10.1. Reactivity
Generates toxic gas in contact with acid. Reactions with the following materials may generate heat: Strong acids.

10.2. Chemical stability
Stability
Inadequately vented containers may become pressurised.

10.3. Possibility of hazardous reactions
See sections 10.1, 10.4 & 10.5

10.4. Conditions to avoid
Avoid exposure to high temperatures or direct sunlight.

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

10.6. Hazardous decomposition products
Toxic chlorine gas can be released if heated.

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.

SECTION 12: Ecological Information

Ecotoxicity
Very toxic to aquatic life. Another potential hazard is from the alkalinity of the product.

12.1. 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. Very toxic to aquatic organisms.

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
The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil
Mobility
Not known.

12.5. Results of PBT and vPvB assessment
This product does not contain any substances classified as PBT or vPvB.

12.6. 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) 1791
UN No. (IMDG) 1791
UN No. (ICAO) 1791

14.2. UN proper shipping name

Proper shipping name (ADR/RID) HYPOCHLORITE SOLUTION
Proper shipping name (IMDG) HYPOCHLORITE SOLUTION
Proper shipping name (ICAO) HYPOCHLORITE 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.

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

Yes.

14.6. Special precautions for user

EmS F-A, S-B

Emergency Action Code

Hazard Identification Number (ADR/RID)

Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
DAIRY HYPOCHLORITE

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

Guidance
Workplace Exposure Limits EH40.

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

Key literature references and sources for data
Material Safety Data Sheet, Misc. manufacturers. CLP Class - Table 3.1 List of harmonised classification and labeling of hazardous substances. CHIP Class - Table 3.2 The list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/548/EEC. ECHA - C&L Inventory database.

Revision comments
Slight change to Packing Group in Transport Section 14 & This product is now using classification from GHS/CLP - Regulation (EC) No 1272/2008 classification, labelling & packaging of substances & mixtures.

Revision date 27/05/2015
Revision Issue 9
SDS status The Risk Phrases / 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 Risk Phrases / Hazard Statements relating to this Product see Section 2.

Risk phrases in full
R31 Contact with acids liberates toxic gas.
R34 Causes burns.
R35 Causes severe burns.
R50 Very toxic to aquatic organisms.

Hazard statements in full
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.