

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

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- 1.1. Product identifier**      Ultraflow
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**      Cleaning of dairy pipelines.
- 1.3. Details of the supplier of the safety data sheet**
- Manufacturer/Supplier      Kilco (International) Ltd.  
 Address      Broomhouses 2 Industrial Estate, Old Glasgow Road Lockerbie, Dumfriesshire. DG11 2SD  
 Phone Number      +44 (0) 1576 205480  
 Fax Number      +44 (0) 1576 205483  
 E-mail      sds@kilco.co.uk
- 1.4. Emergency telephone number**      +44 (0) 207 858 1228 (24 hours)

### SECTION 2: Hazards identification

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#### 2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Corrosive ; Dangerous for the environment

#### 2.2. Label elements

- Symbol (s)      C; N
- Risk phrases      R35 Causes severe burns.  
                          R31 Contact with acids liberates toxic gas.  
                          R50 Very toxic to aquatic organisms
- Safety phrases      S2 Keep out of the reach of children.  
                          S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
                          S28 After contact with skin wash immediately with plenty of water.  
                          S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
                          S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
                          S61 Avoid release to the environment. Refer to special instructions/safety data sheet.

#### 2.3. Other hazards

This product does not contain any PBT or vPvB substances.

### SECTION 3: Composition/information on ingredients

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#### 3.2. Mixtures

Chemical Characterisation: Sodium hypochlorite, surfactants, polymers, sequestrants and alkalis

| Component           | EINECS No: | CAS No:   | % Inclusion | Classification     | Concentration limits (Annex I 67/548/EEC)                               |
|---------------------|------------|-----------|-------------|--------------------|---|
| Sodium Hypochlorite | 231-668-3  | 7681-52-9 | <12         | C; R31 R34, N; R50 | R31: C ≥ 5 %  |
| Sodium Hydroxide    | 215-185-5  | 1310-73-2 | <10         | C; R35             | C; R35: C ≥ 5 %<br>C; R34: 2 % ≤ C < 5 %<br>Xi; R36/38: 0,5 % ≤ C < 2 % |

### SECTION 4: First aid measures

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#### 4.1. Description of first aid measures

- General advice      Remove from exposure
- Eyes      Speed is essential. With eye held open, thoroughly rinse with plenty of water for at least 15 minutes. Protect unharmed eye. Continue rinsing process with saline solution. Seek medical advice immediately.
- Skin      Immediately flood the skin with large quantities of water, preferably under a shower. Continue washing for at least 10 minutes. Remove contaminated clothing immediately as washing proceeds. In case of discomfort: Supply with medical care.
- Ingestion      Do not induce vomiting. Seek urgent medical advice. Only if patient fully conscious - Rinse mouth with water and then drink copious amounts of water, keep the patient warm and at rest.

Inhalation Take affected persons out into the fresh air. If breathing affected give artificial respiration and seek immediate medical advice.

**4.2. Most important symptoms and effects, both acute and delayed**

Eyes Contact with eyes can cause severe damage.  
Skin Material will cause chemical burns.  
Ingestion Causes severe damage to mucous membranes or deeper tissues.  
Inhalation Concentrated mist may cause damage to the upper respiratory tract.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treatment : Treat symptomatically. If in doubt or symptoms persist, seek medical advice immediately.

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**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

Water spray, foam, dry powder or carbon dioxide.

**5.2. Special hazards arising from the substance or mixture**

Chlorine gas

**5.3. Advice for firefighters**

Evacuate personnel to safe areas. Keep out unprotected persons. Keep unauthorised persons away. Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure that there are sufficient retaining facilities for water used to extinguish fire. Contaminated fire-extinguishing water must be disposed of in accordance with the regulations issued by the appropriate local authorities. Fire residues should be disposed of in accordance with the regulations. To cool, spray closed containers with water spray jet. In case of fire, remove the endangered containers and bring to a safe place, if this can be done safely.

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**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Wear appropriate protective clothing, approved respirator, gloves, goggles etc – see section 8. Evacuate personnel to safe areas. Keep out unprotected persons. Keep unauthorised persons away.

**6.2. Environmental precautions**

Observe regulations on preventions of water pollution (collect, dam up, cover up) Prevent the material from entering drains or watercourses.

**6.3. Methods and material for containment and cleaning up**

Large spillages should be collected for disposal. Collect in suitable containers. Keep away from incompatible substances. Clean contaminated surface thoroughly – recommended cleaning agent – water. Dispose of absorbed material in accordance with the regulations. Never return spilled product into its original containers for re-use.

**6.4. Reference to other sections**

Protective clothing - section 8. Disposal – Section 13.

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**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Wear suitable protective clothing. Avoid contact with skin, eyes and clothing. Do not inhale vapour, aerosols, and sprays. When using, avoid spray mists. Operate in a well ventilated place. For personal protection see Section 8. Handle in accordance with good industrial hygiene and safety practice. Immediately change moistened or saturated work clothes. Immediately rinse contaminated or saturated clothing with water. Never return spilled product into its original containers for re-use. Avoid impurities. Transport and store container in upright position only. Do not empty container by means of pressure.

**7.2. Conditions for safe storage, including any incompatibilities**

Keep away from incompatible substances. Keep upright only in the original container. Keep container closed and in a clean, cool, and well ventilated place away from heat, flammable materials and intense light. Avoid residues of the product on the containers. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### 7.3. 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 Standards | EH40 WEL Short Term   | EH40 WEL TWA          |
|---------------------------------|-----------------------|-----------------------|
| Sodium Hydroxide                | 2 mg/m <sup>3</sup>   | 2 mg/m <sup>3</sup>   |
| Chlorine                        | 2.9 mg/m <sup>3</sup> | 1.5 mg/m <sup>3</sup> |

### 8.2. Exposure controls

|                        |   |
|------------------------|---|
| Eye / face protection  | Chemical goggles or face shield EN166   |
| Hand protection        | Chemical resistant gloves. Natural rubber (NR)/ Polychloroprene (PCP). (EN 374).  |
| Other                  | PVC or other impermeable suit (suitable materials – PVC, neoprene, nitrile rubber (NBR), rubber).<br>PVC or rubber boots.   |
| Respiratory protection | Ensure there is good room ventilation. Do not inhale vapour, aerosol or mist. If ventilation is insufficient, wear respiratory protection. Respirator with type ABEK-PI combination filter. (EN141 & EN143 or equivalent) |

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|  |                         |  |                         |
|--|-------------------------|--|-------------------------|
| Appearance                                   | Pale yellow liquid      | Vapour pressure                        | No data available       |
| Odour  | Faint chlorine          | Vapour density                         | No data available       |
| Odour threshold                              | No data available       | Relative density                       | 1.150 to 1.250          |
| pH   | No data available       | Solubility (ies)                       | Water soluble           |
| Melting /freezing point                      | No data available       | Partition coefficient: n-octanol/water | No data available       |
| Boiling point/boiling range                  | No data available       | Auto-ignition temperature              | No data available       |
| Flash point                                  | No data available       | Decomposition temperature              | No data available       |
| Evaporation rate                             | No data available       | Viscosity                              | No data available       |
| Flammability (solid, gas)                    | No flammable components | Explosive properties                   | No explosive components |
| Upper/lower flammability or explosive limits | No explosive components | Oxidising properties                   | Not an oxidiser         |

### 9.2. Other information

No Data

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data supplied

### 10.2. Chemical stability

No data supplied

### 10.3. Possibility of hazardous reactions

No data supplied

### 10.4. Conditions to avoid

Excessive heat. Thermal decomposition will evolve toxic gas.

### 10.5. Incompatible materials

Acids and ammonia solutions. Zinc or aluminium surfaces.

#### 10.6. Hazardous decomposition products

Chlorine gas.

### SECTION 11: Toxicological information

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#### 11.1. Information on toxicological effects

|                           |   |
|---------------------------|---|
| Acute toxicity            | Sodium Hypochlorite LD50 (Oral, Rat) 2900-3400 mg/kg<br>Sodium Hydroxide LD50 (Oral, Rat) 325 mg/kg |
| Irritation                | No data supplied  |
| Corrosivity               | No data supplied  |
| Sensitisation             | No data supplied  |
| Repeated dose toxicity    | No data supplied  |
| Carcinogenicity           | No components are classified as Carcinogenic  |
| Mutagenicity              | No components are classified as Mutagenic   |
| Toxicity for reproduction | No components are classified as Toxic for reproduction  |

### SECTION 12: Ecological information

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#### 12.1. Toxicity

|                     |  |
|---------------------|--|
| Sodium Hydroxide    | LC 50, 96 Hrs, FISH mg/l 33-189 EC 50, 48 Hrs, DAPHNIA, mg/l 40-240 mg/l   |
| Sodium Hypochlorite | LC 50, 96 Hrs, FISH mg/l 0.22 - 0.62 mg/l EC 50, 48 Hrs, DAPHNIA, mg/l 2.1 |

#### 12.2. Persistence and degradability

Readily biodegradable.

#### 12.3. Bioaccumulative potential

Product is not expected to bioaccumulate.

#### 12.4. Mobility in soil

No data supplied

#### 12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

#### 12.6. Other adverse effects

No data supplied

### SECTION 13: Disposal considerations

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#### 13.1. Waste treatment methods

|                    |  |
|--------------------|--|
| Product disposal   | Dispose of in accordance with all applicable local and national regulations.   |
| Container disposal | Contaminated, empty containers must be disposed of as chemical waste. Residual chemical should be disposed of by incineration or by other modes of disposal in compliance with local legislation |

### SECTION 14: Transport information

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|   |   |
|---|---|
| 14.1. UN number   | 1719  |
| 14.2. UN proper shipping name   | Caustic Alkali Liquid N.O.S. (Contains Sodium Hypochlorite, Sodium hydroxide) |
| 14.3. Transport hazard class(es)  | 8   |
| 14.4. Packing group   | II  |
| 14.5. Environmental hazards   | Marine pollutant  |
| 14.6. Special precautions for user  | Not applicable  |
| 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable  |

**SECTION 15: Regulatory information**

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

The Chemical (Hazard Information for Packaging and Supply) Regulations 2009 (SI 2009:716) and associated documents.  
COMMISSION REGULATION (EU) No 453/2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)  
HSE Guidance Note EH40 2007  
The European Agreement Concerning the Carriage of Dangerous Goods by Road (ADR), 2009 Edition.  
The International Maritime Dangerous Goods Code, (IMDG) 2010 Edition.  
The International Air Transport Association Dangerous Goods Regulations, (IATA), 2012 Edition.  
Safety Data Sheets provided by suppliers of component substances.

**15.2. Chemical safety assessment**

A chemical safety assessment has not been carried out.

**SECTION 16: Other information**

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Note: Sections in italics indicate significant changes from the previous version

Full text of R phrases from section 3.

R31 Contact with acids liberates toxic gas

R34 Causes burns

R35 Causes severe burns

R50 Very toxic to aquatic organisms

Training advice.

Those who are employed in the use of this product must be given training which highlights the need to handle and use it only in the recommended manner and at all times make use of the prescribed personal protective equipment.

Recommended restrictions on use.

This product should be stored and handled in accordance with guidance given above and used only in the recommended manner and in conformity with any legal requirements

This safety data sheet has been supplied in accordance with the requirements of Article 31 of Regulation EC No 1907/2006 (the REACH regulation) and the information contained herein is displayed in the order prescribed in Annex II to that regulation, as amended 2010. Its purpose is to facilitate the carrying out of a risk assessment. Employers are reminded of their duty to carry out such an assessment and subsequently to provide an appropriate working environment, to make available to those who are required to use this product all necessary personal protective equipment and to ensure that such equipment is used.

The safety data sheet is additional to the technical data sheet but does not replace it. The information given herein is to the best of our knowledge correct and given in good faith. It relates to the product in the state in which it is delivered. This product is for the uses specified and should only be used for those purposes. Any other use may involve risks. The user will take sole responsibility for the precautions relating to the use of the product. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Kilco (International) Ltd. Registered Office: IA Trench Road, Mallusk, Newtownabbey, Belfast. BT36 4TY  
Registration Number: Ireland NI3240 Place of Registration: Northern Ireland