



## SAFETY DATA SHEET

### Kilfrost K400

According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

##### 1.1. Product identifier

**Product name** Kilfrost K400

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

**Identified uses** Lubricant for pneumatic tools. Antifreeze liquid.

##### 1.3. Details of the supplier of the safety data sheet

**Supplier** Kilfrost Limited  
 Albion Works  
 HALTWHISTLE  
 Northumberland  
 NE49 0HJ  
 ENGLAND  
 Tel: (01434) 320332  
 Fax: (01434) 321463  
 Email: info@kilfrost.com

##### 1.4. Emergency telephone number

**Emergency telephone** +44 (0) 1434 320332 (09:00 - 17:00, Mon-Fri)

**National emergency telephone number** In the event of a medical enquiry involving this product, please contact call NHS 111 or a doctor.

#### SECTION 2: Hazards identification

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

###### Classification (EC 1272/2008)

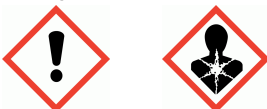
**Physical hazards** Not Classified

**Health hazards** Acute Tox. 4 - H302 Eye Irrit. 2 - H319 STOT RE 2 - H373

**Environmental hazards** Not Classified

##### 2.2. Label elements

###### Pictogram



**Signal word** Warning

**Hazard statements** H302 Harmful if swallowed.  
 H319 Causes serious eye irritation.  
 H373 May cause damage to organs through prolonged or repeated exposure.

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<b>Precautionary statements</b>	<p>P260 Do not breathe vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p>
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**Contains** ETHANEDIOL

<b>Supplementary precautionary statements</b>	<p>P314 Get medical advice/ attention if you feel unwell.</p> <p>P330 Rinse mouth.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
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### 2.3. Other hazards

No other information known.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<p><b>ETHANEDIOL</b> <span style="float: right;"><b>30-60%</b></span></p> <p>CAS number: 107-21-1                      EC number: 203-473-3                      REACH registration number: 01-2119456816-28-XXXX</p>
<p><b>Classification</b></p> <p>Acute Tox. 4 - H302</p> <p>STOT RE 2 - H373</p>
<p><b>SODIUM SULPHONATE</b> <span style="float: right;"><b>10-30%</b></span></p> <p>CAS number: 68608-26-4                      EC number: 271-781-5                      REACH registration number: 01-2119527859-22-XXXX</p>
<p><b>Classification</b></p> <p>Eye Irrit. 2 - H319</p>
<p><b>sodium benzoate</b> <span style="float: right;"><b>1-5%</b></span></p> <p>CAS number: 532-32-1                      EC number: 208-534-8                      REACH registration number: 01-2119460683-35-XXXX</p>
<p><b>Classification</b></p> <p>Eye Irrit. 2 - H319</p>

The full text for all hazard statements is displayed in Section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>General information</b>	Treat symptomatically.
<b>Inhalation</b>	Move affected person to fresh air at once. Get medical attention.

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<b>Ingestion</b>	Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. Keep affected person under observation. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

<b>Inhalation</b>	Irritation of nose, throat and airway.
<b>Ingestion</b>	Harmful if swallowed. May cause discomfort if swallowed. Sore throat. May cause stomach pain or vomiting.
<b>Skin contact</b>	Prolonged skin contact may cause redness and irritation.
<b>Eye contact</b>	Causes serious eye irritation. Symptoms following overexposure may include the following: Redness. Pain. Profuse watering of the eyes.

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

<b>Notes for the doctor</b>	Consult standard guidance for treatment of ethylene glycol intoxication
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Use fire-extinguishing media suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

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

<b>Hazardous combustion products</b>	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
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### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.
<b>Special protective equipment for firefighters</b>	Use protective equipment appropriate for surrounding materials.

## SECTION 6: Accidental release measures

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

<b>Personal precautions</b>	For personal protection, see Section 8.
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### 6.2. Environmental precautions

<b>Environmental precautions</b>	Collect and dispose of spillage as indicated in Section 13. Avoid discharge to the aquatic environment.
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### 6.3. Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.
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### 6.4. Reference to other sections

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**Reference to other sections** For personal protection, see Section 8. Collect and dispose of spillage as indicated in Section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

**Usage precautions** Read and follow manufacturer's recommendations. Avoid inhalation of vapours and spray/mists. Provide adequate ventilation. Avoid contact with skin and eyes.

**Advice on general occupational hygiene** Do not eat, drink or smoke when using this product. Provide eyewash station. Wash contaminated skin thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse.

#### 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. Keep away from food, drink and animal feeding stuffs.

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

**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 limits

##### ETHANEDIOL

Long-term exposure limit (8-hour TWA): WEL 20 ppm 52 mg/m<sup>3</sup> vapour

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup> particulate

Long-term exposure limit (8-hour TWA): WEL 20 ppm 52 mg/m<sup>3</sup> vapour  
Sk

Short-term exposure limit (15-minute): WEL 40 ppm 104 mg/m<sup>3</sup> vapour

Short-term exposure limit (15-minute): WEL 40 ppm 104 mg/m<sup>3</sup> vapour  
Sk, Sk

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup> particulate  
Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

##### ETHANEDIOL (CAS: 107-21-1)

**DNEL** Industry - Inhalation; Short term : 35 mg/m<sup>3</sup>  
Industry - Dermal; Long term : 106 mg/kg/day  
Consumer - Dermal; Long term : 53 mg/kg/day  
Consumer - Inhalation; Long term : 7 mg/m<sup>3</sup>

**PNEC** - Fresh water; 10 mg/l  
- Marine water; 1 mg/l  
- Soil; 1.53 mg/kg  
- STP; 199.5 mg/l  
- Sediment (Freshwater); 37 mg/kg  
- Sediment (Marinewater); 3.7 mg/kg  
- Intermittent release; 10 mg/l

#### 8.2. Exposure controls

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### Protective equipment



### Appropriate engineering controls

Provide adequate general and local exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

### Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield.

### Hand protection

It is recommended that chemical-resistant, impervious gloves are worn. Wear protective gloves made of the following material: Nitrile rubber. Rubber (natural, latex). Neoprene. To protect hands from chemicals, gloves should comply with European Standard EN374.

### Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination.

### Hygiene measures

Do not eat, drink or smoke when using this product. Wash hands after handling. Wash contaminated clothing before reuse. Eye wash facilities and emergency shower must be available when handling this product.

### Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P3.

### Environmental exposure controls

Keep container tightly sealed when not in use.

## SECTION 9: Physical and Chemical Properties

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

Appearance	Liquid.
Colour	Red-brown.
Odour	Slight.
Odour threshold	No information available.
pH	pH (concentrated solution): 8.5 - 9.5
Initial boiling point and range	115 - 125 @°C @ 1013 hPa
Flash point	>115 degC°C CC (Closed cup).
Evaporation rate	0.01 based on raw material
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 3.2 Upper flammable/explosive limit: 15.3 based on raw material based on raw material
Vapour pressure	8.5 mm Hg @ °C
Vapour density	1.69
Relative density	1.107 @ @ 20°C
Solubility(ies)	Miscible with water.
Partition coefficient	log Pow: 1.36 Based on raw material
Auto-ignition temperature	398°C based on raw material
Decomposition Temperature	No information available.

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<b>Viscosity</b>	20 m2/s @ 20°C
<b>Explosive properties</b>	Not considered to be explosive.
<b>Oxidising properties</b>	Does not meet the criteria for classification as oxidising.

### 9.2. Other information

<b>Freezing Point (°C)</b>	-60 degC
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
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### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
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### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Not relevant.
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### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid heat.
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### 10.5. Incompatible materials

<b>Materials to avoid</b>	Strong oxidising agents. Strong acids.
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### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	Does not decompose when used and stored as recommended. Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

<b>ATE oral (mg/kg)</b>	1,021.0
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#### Acute toxicity - dermal

<b>Notes (dermal LD<sub>50</sub>)</b>	No information available.
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#### Acute toxicity - inhalation

<b>Notes (inhalation LC<sub>50</sub>)</b>	No information available.
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#### Skin corrosion/irritation

<b>Skin corrosion/irritation</b>	No information available.
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#### Serious eye damage/irritation

<b>Serious eye damage/irritation</b>	Causes serious eye irritation.
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#### Respiratory sensitisation

<b>Respiratory sensitisation</b>	No information available.
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#### Skin sensitisation

<b>Skin sensitisation</b>	No information available.
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#### Germ cell mutagenicity

<b>Genotoxicity - in vitro</b>	No information available.
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## Kilfrost K400

### Carcinogenicity

**Carcinogenicity** Does not contain any substances known to be carcinogenic.

### Reproductive toxicity

**Reproductive toxicity - fertility** No information available.

### Specific target organ toxicity - single exposure

**STOT - single exposure** No information available.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** STOT RE 2 - H373 May cause damage to organs (Kidneys) through prolonged or repeated exposure if swallowed.

### Aspiration hazard

**Aspiration hazard** No data available.

**Inhalation** Vapour may irritate respiratory system/lungs.

**Ingestion** Harmful if swallowed. May cause stomach pain or vomiting.

**Skin contact** Prolonged and frequent contact may cause redness and irritation.

**Eye contact** Risk of serious damage to eyes. Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain. May cause severe eye irritation.

### Toxicological information on ingredients.

#### ETHANEDIOL

##### Acute toxicity - oral

**ATE oral (mg/kg)** 500.0

##### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 10,600.0

**Species** Rabbit

##### Acute toxicity - inhalation

**Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)** 2.5

**Species** Rat

### **SECTION 12: Ecological Information**

#### 12.1. Toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 18500 mg/l, Onchorhynchus mykiss (Rainbow trout)  
Estimated value.

### Ecological information on ingredients.

#### ETHANEDIOL

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 72860 mg/l, Pimephales promelas (Fat-head Minnow)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: >100 mg/l, Daphnia magna

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**Acute toxicity - aquatic plants** EC<sub>50</sub>, 96 hours: 6500 13000 mg/l,

**Acute toxicity - microorganisms** EC<sub>50</sub>, 30 minutes: 225 mg/l, Activated sludge

### 12.2. Persistence and degradability

**Persistence and degradability** The product is expected to be biodegradable.

### Ecological information on ingredients.

#### ETHANEDIOL

**Persistence and degradability** The product is readily biodegradable.

**Biodegradation** - Degradation 90: > 10 days

**Chemical oxygen demand** 1.22

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** log Pow: 1.36 Based on raw material

### Ecological information on ingredients.

#### ETHANEDIOL

**Bioaccumulative potential** The product is not bioaccumulating.

**Partition coefficient** : -1.36

### 12.4. Mobility in soil

**Mobility** The product is miscible with water. May spread in water systems.

### Ecological information on ingredients.

#### ETHANEDIOL

**Adsorption/desorption coefficient** Water - Log Koc: 1 @ °C

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** No data available.

### Ecological information on ingredients.

#### ETHANEDIOL

**Results of PBT and vPvB assessment** This substance is not classified as PBT or vPvB according to current EU criteria.

### 12.6. Other adverse effects

**Other adverse effects** Not determined.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods



## Kilfrost K400

<b>General information</b>	Waste should be treated as controlled waste.
<b>Disposal methods</b>	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

### SECTION 14: Transport information

<b>General</b>	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
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#### 14.1. UN number

Not applicable.

#### 14.2. UN proper shipping name

Not applicable.

#### 14.3. Transport hazard class(es)

No transport warning sign required.

#### 14.4. Packing group

Not applicable.

#### 14.5. Environmental hazards

##### **Environmentally hazardous substance/marine pollutant**

No.

#### 14.6. Special precautions for user

Not applicable.

#### 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 applicable.

### SECTION 15: Regulatory information

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

<b>EU legislation</b>	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
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<b>Guidance</b>	Workplace Exposure Limits EH40.
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#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

<b>General information</b>	Only trained personnel should use this material.
<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	29/08/2019
<b>Revision</b>	3.5

## Kilfrost K400

<b>Supersedes date</b>	14/12/2018
<b>SDS number</b>	10064
<b>SDS status</b>	Approved.
<b>Hazard statements in full</b>	H302 Harmful if swallowed. H319 Causes serious eye irritation. H373 May cause damage to organs through prolonged or repeated exposure. H373 May cause damage to organs (Kidneys) through prolonged or repeated exposure if swallowed.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.