

SAFETY DATA SHEET

NATIONAL ICEKLEEN

Page: 1

Compilation date: 13/07/2010

Revision date: 09/03/2011

Revision No: 2

Section 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier****Product name:** NATIONAL ICEKLEEN**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.3. Details of the supplier of the safety data sheet****Company name:** National refrigerants Ltd.

4 Watling close

Sketchley Meadows business Park

Hinckley

leicestershire

LE10 3EZ

United Kingdom

Tel: +44(0)1455 630790**Fax:** +44(0)1455 630791**Email:** sds@nationalref.com**1.4. Emergency telephone number****Emergency tel:** +44(0)1865 407333 (24 hour. English Only)**Section 2: Hazards identification****2.1. Classification of the substance or mixture****Classification under CHIP:** C: R34**Most important adverse effects:** Causes burns.**2.2. Label elements****Label elements under CHIP:****Hazard symbols:** Corrosive.**Risk phrases:** R34: Causes burns.**Safety phrases:** S1/2: Keep locked up and out of the reach of children.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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).

[cont...]

SAFETY DATA SHEET

NATIONAL ICEKLEEN

Page: 2

2.3. Other hazards

PBT: This substance is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

ORTHOPHOSPHORIC ACID

EINECS	CAS	CHIP Classification	CLP Classification	Percent
231-633-2	7664-38-2	C: R34	-	10-30%

ACETIC ACID

200-580-7	64-19-7	-: R10; C: R35	-	1-10%
-----------	---------	----------------	---	-------

Section 4: First aid measures

4.1. Description of first aid measures

- Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.
- Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.
- Ingestion:** Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.
- Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If unconscious, check for breathing and apply artificial respiration if necessary. Transfer to hospital as soon as possible.

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

- Skin contact:** * There may be redness or whiteness of the skin in the area of exposure. Blistering may occur. Progressive ulceration will occur if treatment is not immediate.
- Eye contact:** * There may be pain and redness. Corneal burns may occur. May cause permanent damage.
- Ingestion:** * There may be soreness and redness of the mouth and throat. Corrosive burns may appear around the lips. Blood may be vomited. Nausea and stomach pain may occur.
- Inhalation:** * There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Delayed / immediate effects: * Immediate effects can be expected after long-term exposure.

[cont...]

SAFETY DATA SHEET

NATIONAL ICEKLEEN

Page: 3

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

Immediate / special treatment: Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Corrosive. In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid. Remove all incompatible materials as outlined in section 10 of SDS.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amounts of water. Avoid all incompatible materials in clean-up procedure - see section 10 of SDS.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging.

[cont...]

SAFETY DATA SHEET

NATIONAL ICEKLEEN

Page: 4

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

ORTHOPHOSPHORIC ACID...100%

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	1 mg/m ³	2 mg/m ³	-	-

ACETIC ACID...100%

UK	25 mg/m ³	37 mg/m ³	-	-
----	----------------------	----------------------	---	---

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. Ensure all engineering measures mentioned in section 7 of SDS are in place.

Respiratory protection: Respiratory protection not required. Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Impermeable gloves.

Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.

Skin protection: Impermeable protective clothing.

Environmental: Prevent from entering in public sewers or the immediate environment.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Purple

Odour: Irritating odour

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Miscible in all proportions

Relative density: 1.16

9.2. Other information

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: * Stable under recommended transport or storage conditions.

[cont...]

SAFETY DATA SHEET

NATIONAL ICEKLEEN

Page: 5

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: * Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Alkalis. Finely powdered metals. Oxidising agents.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Relevant effects for mixture:

Effect	Route	Basi
Corrosivity	OPT INH DRM	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: * There may be redness or whiteness of the skin in the area of exposure. Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: * There may be pain and redness. Corneal burns may occur. May cause permanent damage.

Ingestion: * There may be soreness and redness of the mouth and throat. Corrosive burns may appear around the lips. Blood may be vomited. Nausea and stomach pain may occur.

Inhalation: * There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Delayed / immediate effects: * Immediate effects can be expected after long-term exposure.

Other information: * Not applicable.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: Not applicable.

12.2. Persistence and degradability

Persistence and degradability: The biodegradability of the surfactants contained in the product are in accordance with the requirements of the EU Detergent Regulation (EC/648/2004).
Readily biodegradable.

[cont...]

SAFETY DATA SHEET

NATIONAL ICEKLEEN

Page: 6

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Soluble in water. Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company. Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the other possible disposal operations (e.g. evaporation, drying, calcination, etc.).

Recovery operations: Recovery of components used for pollution abatement.

Disposal of packaging: Clean with water. Dispose of as normal industrial waste. May be reused following decontamination.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN1760

14.2. UN proper shipping name

Shipping name: CORROSIVE LIQUID, N.O.S.
(ORTHOPHOSPHORIC ACID
ACETIC ACID)

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: II

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

Tunnel code: E

[cont...]

SAFETY DATA SHEET

NATIONAL ICEKLEEN

Page: 7

Transport category: 2

Section 15: Regulatory information

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

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and 3: R10: Flammable.

R34: Causes burns.

R35: Causes severe burns.

Legal disclaimer: *National Refrigerants Ltd. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other methods of use of the product and of the information referred to herein are beyond the control of National Refrigerants Ltd. National Refrigerants Ltd. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.*