

SAFETY DATA SHEET

NATIONAL KLEENBRITE

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Compilation date: 09/07/2010

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Revision No: 2

Section 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier****Product name:** NATIONAL KLEENBRITE**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.

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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:** T: R23/24/25; C: R34; Xn: R68/20/21/22**Most important adverse effects:** Toxic by inhalation, in contact with skin and if swallowed. Causes burns. Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.**2.2. Label elements****Label elements under CHIP:****Hazard symbols:** Toxic.

Corrosive.

**Risk phrases:** R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.

R34: Causes burns.

R68/20/21/22: Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

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Safety phrases: S1/2: Keep locked up and out of the reach of children.
S23: Do not breathe spray.
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.
S38: In case of insufficient ventilation, wear suitable respiratory equipment.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S63: In case of accident by inhalation, remove casualty to fresh air and keep at rest.

Precautionary phrases: Ensure Calcium Gluconate antidote gel is always available.

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:

YDROFLUORIC ACID

EINECS	CAS	CHIP Classification	CLP Classification	Percent
231-634-8	7664-39-3	T+: R26/27/28; C: R35	-	1-10%

ORTHOPHOSPHORIC ACID

231-633-2	7664-38-2	C: R34	-	1-10%
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AMPHOTERIC SURFACTANT.

-	-	Xn: R20/21/22; Xn: R68/20/21/22	-	1-10%
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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. If conscious, give half a litre of water to drink immediately. 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 conscious, ensure the casualty sits or lies down. If unconscious and breathing is OK,

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place in the recovery position. If unconscious, check for breathing and apply artificial respiration if necessary. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. 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. Irritation or pain may occur at the site of contact. Absorption through the skin may be fatal. Progressive ulceration will occur if treatment is not immediate.

Eye contact: There may be severe pain. The eyes may water profusely. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. There may be vomiting. Convulsions may occur. There may be loss of consciousness.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Absorption through the lungs can occur causing symptoms similar to those of ingestion. Convulsions may occur. There may be loss of consciousness.

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

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

Immediate / special treatment: * Eye bathing equipment should be available on the premises. Treat with calcium gluconate paste.

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: Toxic. 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: Notify the police and fire brigade immediately. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

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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.

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 exhaust 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. Do not use aluminium containers.

7.3. Specific end use(s)

Specific end use(s): No special requirement.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

HYDROFLUORIC ACID...100%

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	1.5 mg/m3	2.5 mg/m3	-	-

ORTHOPHOSPHORIC ACID...100%

UK	1 mg/m3	2 mg/m3	-	-
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AMPHOTERIC SURFACTANT.

UK	-	-	270 mg/m3	6000 ppm
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8.2. Exposure controls

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

Respiratory protection: Gas/vapour filter, type E: sulphur dioxide and other acid gases (EN141).

Hand protection: Impermeable gloves.

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

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Skin protection: Impermeable protective clothing.

Environmental: * Prevent from entering in public sewers or the immediate environment. Ensure all engineering measures mentioned in section 7 of SDS are in place.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Pink

Odour: Acrid

Evaporation rate: Moderate

Solubility in water: Miscible in all proportions

Relative density: 1.05

pH: 3.02

9.2. Other information

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: * Stable under recommended transport or storage conditions.

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: eat. Hot surfaces. Flames.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Alkalis.

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	Basis
Acute toxicity (toxic)	INH DRM ING	azardous: calculated

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Corrosivity	OPT INH DRM	azardous: calculated
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Symptoms / routes of exposure

Skin contact: There may be redness or whiteness of the skin in the area of exposure. Irritation or pain may occur at the site of contact. Absorption through the skin may be fatal. Progressive ulceration will occur if treatment is not immediate.

Eye contact: There may be severe pain. The eyes may water profusely. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. There may be vomiting. Convulsions may occur. There may be loss of consciousness.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Absorption through the lungs can occur causing symptoms similar to those of ingestion. Convulsions may occur. There may be loss of consciousness.

Delayed / immediate effects: * Immediate effects can be expected after short-term exposure. Delayed effects can be expected after short-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 this product are in accordance with the requirements of the EU Detergent Regulation (EC/648/2004).
Rapidly biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil. Soluble in water.

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: Toxic to aquatic organisms.

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

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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 in a regulated landfill site or other method for hazardous or toxic wastes.

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: UN3289

14.2. UN proper shipping name

Shipping name: TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S.
(HYDROFLUORIC ACID
ORTHOPHOSPHORIC ACID)

14.3. Transport hazard class(es)

Transport class: 6.1 (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: D/E

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: R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

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R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.

R26/27/28: Very toxic by inhalation, in contact with skin and if swallowed.

R34: Causes burns.

R35: Causes severe burns.

R68/20/21/22: Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

Legal disclaimer:

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