

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

1.1. Product identifier Virex

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

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

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Corrosive

2.2. Label elements

Symbol (s) C
 Risk phrases R22 Harmful if swallowed.
 R34 Causes burns.
 R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 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

3.2. Mixtures

Chemical Characterisation: oxidiser, chlorine source, surfactant, sequestrant and acidifiers

Component	EINECS No:	CAS No:	% Inclusion	Classification	Concentration limits (Annex I 67/548/EEC)
Pentapotassium bis (peroxymonosulphate)	274-778-7	70693-62-8	50	C; R34, Xn R22, N R52	-
Sodium dichloroisocyanurate	220-767-7	2893-78-9	<2.5	O; R8, Xn; R22 R31 Xi; R36/37 N; R50-53	Xn; R22: C ≥ 10 % Xi; R36/37: C ≥ 10 % R31: C ≥ 10 %

SECTION 4: First aid measures

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 Dust or 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.

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

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.

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.

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 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 dichloroisocyanurate	9 mg/m ³	3 mg/m ³

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). PVC or rubber boots.
Respiratory protection	Ensure there is good room ventilation. Do not inhale (DUST) vapour, aerosol or mist. If ventilation is insufficient, wear respiratory protection. Respirator with type ABEK-PI filter. (EN141 / EN143 or equivalent)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Free flowing white powder	Vapour pressure	No data available
Odour	Faint chlorine	Vapour density	No data available
Odour threshold	No data available	Relative density	No data available
pH	1.90 – 2.30	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	Not applicable	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

Extremes of temperature. Damp or wet conditions.

10.5. Incompatible materials

Aluminium, zinc or their alloys.

10.6. Hazardous decomposition products

Toxic gases, such as hydrogen and chlorine.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Pentapotassium bis (peroxymonosulphate) Acute Toxicity LD50 (Oral, Rat) 2000mg/kg Sodium Dichloroisocyanurate Oral; LD10 (Human) 3570mg/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

12.1. Toxicity

Pentapotassium bis (peroxymonosulphate) LC50 Fish 96 hour 53mg/l.

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

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

14.1. UN number	3260
14.2. UN proper shipping name	Corrosive Solid, Acidic, Inorganic, N.O.S. (Contains Monopersulphate Compound)
14.3. Transport hazard class(es)	8
14.4. Packing group	III
14.5. Environmental hazards	Not 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

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

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

Full text of R phrases from section 3.

R8 Contact with combustible material may cause fire

R22 Harmful if swallowed

R31 Contact with acids liberates toxic gas

R34 Causes burns

R36/37 Irritating to eyes and respiratory system

R52 Harmful to aquatic organisms

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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.

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