



## SAFETY DATA SHEET

VERTEX

Page: 1

Compilation date: 29/09/2016

Revision No: 1.0

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

#### 1.1. Product identifier

**Product name:** VERTEX

**Product code:** 94

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

**Use of substance / mixture:** Air Conditioning cleaner for Condensers and Evaporators

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

**Company name:** Advanced Engineering Ltd

Guardian House

Stroudley Road

Basingstoke

Hampshire

RG24 8NL

United Kingdom

**Tel:** +44(0)1256460300

**Fax:** +44(0)1256462266

**Email:** sales@advancedengineering.co.uk

#### 1.4. Emergency telephone number

**Emergency tel:** Advanced Engineering Ltd (24hr) +44 (0) 1256 854318

### Section 2: Hazards identification

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

**Classification under CLP:** Eye Dam. 1: H318

**Most important adverse effects:** Causes serious eye damage.

#### 2.2. Label elements

**Label elements:**

**Hazard statements:** H318: Causes serious eye damage.

**Hazard pictograms:** GHS05: Corrosion



**Signal words:** Danger

**Precautionary statements:** P262: Do not get in eyes, on skin, or on clothing.

P264: Wash hands thoroughly after handling.

P280: Wear eye protection.

[cont...]

# SAFETY DATA SHEET

VERTEX

Page: 2

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+313: If eye irritation persists: Get medical advice.

## 2.3. Other hazards

**PBT:** This product is not identified as a PBT / vPvB substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous ingredients:

D P M

EINECS	CAS	PBT / WEL	CLP Classification	Percent
252-104-2	34590-94-8	Substance with a Community workplace exposure limit.	-	1-10%

#### TRISODIUM CITRATE DIHYDRATE

200-675-3	6132-04-3	Substance with a Community workplace exposure limit.	-	1-10%
-----------	-----------	--	---	-------

#### SODIUM XYLENESULPHONATE

-	1300-72-7	-	Eye Irrit. 2: H319	1-10%
---	-----------	---	--------------------	-------

#### SODIUM ALKYL BENZENE SULPHONATE

285-600-2	85117-50-6	-	Acute Tox. 4: H302; Skin Irrit. 2: H315; Eye Dam. 1: H318	1-10%
-----------	------------	---	---	-------

#### ALCOHOLS, C9-11 ETHOXYLATED, 2.5 EO

-	68439-46-3	-	Eye Dam. 1: H318	1-10%
---	------------	---	------------------	-------

#### NON-IONIC SURFACTANT

-	78330-21-9	-	Acute Tox. 4: H302; Eye Dam. 1: H318	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. Wash immediately with plenty of soap and water. 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. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Move to fresh air in case of accidental inhalation of vapours.

[cont...]

# SAFETY DATA SHEET

VERTEX

Page: 3

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

**Skin contact:** There may be irritation and redness at the site of contact.

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

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

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

## 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:** 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. Remove all incompatible materials as outlined in section 10 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

### 6.2. Environmental precautions

**Environmental precautions:** In bulk packaged form, do not discard into Drains, Sewers or surface water courses. Contain the spillage using bunding.

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

**Clean-up procedures:** 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.

### 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

[cont...]

# SAFETY DATA SHEET

VERTEX

Page: 4

## 7.1. Precautions for safe handling

**Handling requirements:** Avoid direct contact with the substance.

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

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

**Suitable packaging:** Must only be kept in original packaging.

## 7.3. Specific end use(s)

**Specific end use(s):** Air Conditioning cleaner for Condensers and Evaporators

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Hazardous ingredients:**

**TRISODIUM CITRATE DIHYDRATE**

**Workplace exposure limits:**

**Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
EU	4 mg/m <sup>3</sup>	-	-	-

### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area.

**Respiratory protection:** Respiratory protection not required.

**Hand protection:** Protective gloves.

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

**Skin protection:** Protective clothing.

**Environmental:** In bulk packaged form, do not discard into Drains, Sewers or surface water courses.

## Section 9: Physical and chemical properties

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

**State:** Liquid

**Colour:** Purple

**Odour:** Sweet-smelling

**Solubility in water:** Highly soluble

**Boiling point/range °C:** 99

**upper:** 95

**Relative density:** 1.03

**pH:** 7.7

### 9.2. Other information

**Other information:** No data available.

[cont...]

# SAFETY DATA SHEET

VERTEX

Page: 5

## 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:** Heat.

### 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents. Strong acids.

### 10.6. Hazardous decomposition products

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

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### Hazardous ingredients:

#### TRISODIUM CITRATE DIHYDRATE

-	MUS	LD50	170	mg/kg
-	RAT	LD50	1548	mg/kg

#### Relevant hazards for product:

Hazard	Route	Basis
Serious eye damage/irritation	OPT	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

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

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

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

**Other information:** Not applicable.

[cont...]

# SAFETY DATA SHEET

VERTEX

Page: 6

## Section 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity values:** No data available.

### 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). Readily 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 product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**Recovery operations:** Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).

**Waste code number:** 16 03 05

**Disposal of packaging:** Clean with water. 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

**Transport class:** This product does not require a classification for transport.

## Section 15: Regulatory information

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

**Specific regulations:** Regulation (EC) No 1272/2008 of the European Parliament and of the Council of the 16th December 2008 on Classification, labelling and packaging of Substances and Mixtures. The biodegradability of the surfactants contained in this product are in accordance with the requirements of the EU Detergent Regulation (EC/648/2004).

[cont...]

# SAFETY DATA SHEET

VERTEX

Page: 7

## 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 2015/830.

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

**Phrases used in s.2 and s.3:** H302: Harmful if swallowed.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.