

# ***Kamco Limited***

## **MATERIAL SAFETY DATA SHEET**

### **SCALEBREAKER FX**

Revision date: 22/9/2011

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

##### **1.1. Product identifier**

**Product name:** SCALEBREAKER FX

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

**Use of substance / mixture:** Flushing and descaling of heating and cooling systems.

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

**Company name:** Kamco Ltd  
Unit 9, Curo Park  
Frogmore  
St Albans  
Herts  
AL2 2DD

**Tel:** 01727 875020

**Fax:** 01727 875335

**Email:** info@kamco.co.uk

##### **1.4. Emergency telephone number**

#### **Section 2: Hazards identification**

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

**Classification under CHIP:** C;R34

**Classification under CLP:** Skin Corr. 1B – H314

**Most important adverse effects:** Causes severe skin burns and eye damage.

##### **2.2. Label elements**

**Label elements under CLP:**

**Hazard statements:** H314: Causes severe skin burns and eye damage.

**Signal words:** Danger

**Hazard pictograms:** GHS05: Corrosion



**Precautionary statements:** P280: Wear protective glove/protective clothing/eye protection/face protection.  
P301/330/331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303/361/353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304/340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305/351/338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P313: Get medical advice/attention.

**Label elements under CHIP:**

**Hazard symbols:**

**Risk phrases:**

**Safety phrases:**

**2.3. Other hazards**

**PBT:**

**Section 3: Composition/information on ingredients**

**3.2. Mixtures**

**Hazardous ingredients:**

PHOSPHORIC ACID

EINECS	CAS	CHIP Classification	CLP Classification	Percent
231-633-2	7664-38-2			

**Section 4: First aid measures**

**4.1. Description of first aid measures**

**Skin contact:** Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

**Eye contact:** Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Continue to rinse for at least 15 minutes and get medical attention.

**Ingestion:** Immediately rinse mouth and drink plenty of water (200-300 ml). Get medical attention immediately!

**Inhalation:** Remove victim immediately from source of exposure. Get medical attention if any discomfort continues.

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

**Skin contact:** May cause serious chemical burns to the skin.

**Eye contact:** May very rapidly cause severe eye damage, possibly loss of sight.

**Ingestion:** May cause chemical burns in mouth, oesophagus and stomach.

**Inhalation:** Irritating to respiratory system. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

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

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

**Immediate / special treatment:** Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

### Section 5: Fire-fighting measures

#### 5.1. Extinguishing media

**Extinguishing media:** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

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

**Exposure hazards:** Oxides of: Phosphorus

#### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### Section 6: Accidental release measures

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

**Personal precautions:** Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of spray mist and contact with skin and eyes.

#### 6.2. Environmental precautions

**Environmental precautions:** Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

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

**Clean-up procedures:** Absorb with inert, damp, non-combustible material. Collect spillages in containers, slowly neutralise with sodium carbonate, bicarbonate or hydroxide, and flush area with copious amounts of water.

#### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of MSDS

### Section 7: Handling and storage

#### 7.1. Precautions for safe handling

**Handling requirements:** Avoid spilling, skin and eye contact. Mechanical ventilation or local exhaust ventilation is required.

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

**Storage conditions:** Keep in original container. Keep containers tightly closed. Keep NEUTRALISING CRYSTALS available to help deal with small spillages.

**Suitable packaging:** Polyethylene. Stainless steel.

### 7.3. Specific end use(s)

**Specific end uses(s):** Flushing and descaling of heating and cooling systems.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

### 8.2. Exposure controls

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

**Respiratory protection:** Avoid breathing vapour. If ventilation is insufficient, suitable respiratory protection must be provided.

**Hand protection:** Protective rubber gloves.

**Eye protection:** Safety goggles/face shield. Ensure eye bath is to hand.

**Skin protection:** Protective clothing (e.g. rubber apron/rubber footwear)

## Section 9: Physical and chemical properties

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

**State:** Viscous liquid

**Colour:** Pinkish-red.

**Odour:** Very slight sweet odour.

**Solubility in water:** Miscible with water, soluble in ethanol

**pH:** (of 10% solution): 1

### 9.2. Other information

## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** Provide suitable ventilation when descaling. Some hydrogen may be evolved, and this is a flammable gas. Avoid smoking nearby, or any other means of ignition.

### 10.2. Chemical stability

**Chemical stability:** Stable under normal temperature conditions and recommended use.

### 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:** Avoid extreme temperatures for prolonged periods of time (boiling point 171°C).

### 10.5. Incompatible materials

**Materials to avoid:** Strong alkalis. Oxidising agents.

#### 10.6. Hazardous decomposition products

**Haz. decomp. products:** Oxides of: Phosphorous.

### Section 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Symptoms / routes of exposure

**Skin contact:** May cause serious chemical burns to the skin.

**Eye contact:** Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight.

**Ingestion:** May cause chemical burns in mouth, oesophagus and stomach.

**Inhalation:** Irritating to respiratory system. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

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

### Section 12: Ecological information

#### 12.1. Toxicity

**Toxicity:** May affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

#### 12.2. Persistence and degradability

**Persistence and degradability:**

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential:**

#### 12.4. Mobility in soil

**Mobility:** Miscible in water. May spread in water systems.

#### 12.5. Results of PBT and vPvB assessment

**PBT identification:**

#### 12.6. Other adverse effects

**Other adverse effects:**

### Section 13: Disposal considerations

#### 13.1. Waste treatment methods

**Disposal operations:** Dispose by flushing away with water after neutralising with alkali to neutral pH. For large quantities, seek advice from special waste disposal company or local authority.

**Disposal of packaging:** Return empty containers to the supplier for recycling. Damaged containers should be destroyed by cutting up or incineration. Do not use for potable water.

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

#### Section 14: Transport information

UK Road Class:	8	UK Road Pack Gr:	III
Shipping Name:	Scalebreaker FX	ADR Class:	Class 8: Corrosive substances
UN No. ROAD:	1805	Tunnel Restriction Code:	(E)
ADR Class No:	8	ADR Label No:	8
ADR Pack Group:	III	CEFIC TEC ® No:	80GC1-II+III 80GC2-II+III
Hazard No. (ADR):	80	RID Pack Group:	III
Hazchem Code:	2R	IMDG Class:	8
RID Class No:	8	EMS:	F-A, S-B
UN No. SEA:	1805	Air Class:	8
IMDG Pack GR:	III		
UN No. AIR:	1805		
Air Pack GR:	III		

#### Section 15: Regulatory information

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

**Statutory instruments:** The chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

**Approved Code of Practice:** Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

**Guidance Notes:** CHIP for everyone HSG (108). Workplace Exposure Limits EH40.

#### Section 16: Other information

##### Other information:

**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. Kamco Limited shall not be held liable for any damage resulting from handling or from contact with the above product.