

Kamco Limited

MATERIAL SAFETY DATA SHEET

POWER FLUSH FX2

Revision date: 22/9/2011

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

1.1. Product identifier

Product name: POWER FLUSH FX2

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:	Power Flush FX2 Liquid	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.