

# ***Kamco Limited***

## **MATERIAL SAFETY DATA SHEET**

### **SYSTEM PRE-CLEAN**

Revision date: 22/9/2011

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

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

**Product name:** SYSTEM PRE-CLEAN

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

**Use of substance / mixture:** A neutral pH pre-commission cleaner for heating and chilled water 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:** T: R25

**Classification under CLP:** Acute Tox. 4: H302

**Most important adverse effects:** Toxic if swallowed

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

**Label elements under CLP:**

**Hazard statements:** H302: Harmful if swallowed

**Signal words:** Warning

**Hazard pictograms:** GHS07: Exclamation mark



**Precautionary statements:** P264: Wash thoroughly after handling.  
 P270: Do not eat, drink or smoke when using this product.  
 P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
 P330: Rinse mouth.  
 P501: Dispose of to comply with local regulations.

**Label elements under CHIP:**

**Hazard symbols:** Toxic



**Risk phrases:** R25: Toxic if swallowed

**Safety phrases:** 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).  
 S24/25: Avoid contact with skin and eyes.  
 S28 After contact with skin, wash immediately with plenty of water.

**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:**

SODIUM NITRITE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
231-555-9	7632-00-0	O: R8; T:R25; N:R50	Ox. Sol. 3: H272; Acute Tox. 3: H301; Aquatic Acute 1: H400	1-10%

TRIETHANOLAMINE

203-049-8	102-71-6	Xi: R36/38	-	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. Wash immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**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. Transfer to hospital as soon as possible.

#### 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.

**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.

**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:** 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 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 MSDS. Turn leaking containers leak-side up to prevent the escape of liquid.

#### 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 MSDS

### Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Avoid direct contact with the substance. Avoid the formation or spread of mists in the air. Ensure there is sufficient ventilation of the area.

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

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

**Suitable packaging:** Polyethylene. Polypropylene Stainless steel. Unsuitable packaging: metals and alloy.

### 7.3. Specific end use(s)

**Specific end uses(s):** A pre-commission cleaner for heating and chilled water 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:** Self-contained breathing apparatus must be available in case of emergency.

**Hand protection:** Protective gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Protective clothing.

## Section 9: Physical and chemical properties

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

**State:** Liquid

**Colour:** Colourless

**Odour:** Odourless

**Solubility in water:** Miscible in all proportions

**pH:** 8 - 9

### 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:** Heat

#### 10.5. Incompatible materials

**Materials to avoid:** 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

##### Relevant effects for mixture:

Effect	Route	Basis
Acute toxicity (toxic)	ING	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.

**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.

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

### Section 12: Ecological information

#### 12.1. Toxicity

#### 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

#### 12.4. Mobility in soil

**Mobility:** Readily absorbed into soil.

#### 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:** 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.
- 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

**Transport class:** This product is not classified for transport.

## 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:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No: 453/2010
- Phrases used in s.2 and 3:** H272: May intensify fire; oxidiser.  
H301: Toxic if swallowed.  
H302: Harmful if swallowed.  
H400: Very toxic to aquatic life.  
R8: Contact with combustible material may cause fire.  
R25: Toxic if swallowed.  
R36/38: Irritating to eyes and skin.  
R50: Very toxic to aquatic organisms.
- 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.