

Kamco Limited

MATERIAL SAFETY DATA SHEET

SYSTEMSAFE-IC

Revision date: 22/9/2011

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

1.1. Product identifier

Product name: SYSTEMSAFE-IC

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

Use if substance / mixture: Scale & corrosion inhibitor for closed circuit low pressure hot water systems 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; Xi: R36/38; Sens: R43

Classification under CLP: Acute Tox.4: H302; Eye Irrit.2: H319; Skin Irrit.2: H315; Skin Sens.1: H317

Most important adverse effects: Toxic if swallowed. Irritating to eyes and skin. May cause sensitisation by skin contact.

2.2. Label elements

Label elements under CLP:

Hazard statements: H302: Harmful if swallowed.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.

Signal words: WARNING

Hazard pictograms: GHS07: Exclamation mark.



Precautionary statements: P264: Wash thoroughly after handling.
P501: Dispose of to comply with local regulations.
P270: Do not eat, drink or smoke when using this product.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+310: IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321: Specific treatment (see on this label).
P330: Rinse mouth.
P332+313: If skin irritation occurs seek medical attention.
P337+313: If eye irritation persists seek medical attention.
P362: Take off contaminated clothing and wash before reuse.
P363: Wash contaminated clothing before reuse.

Label elements under CHIP:

Hazard symbols: Toxic



Risk phrases: R25: Toxic if swallowed.
R36/38: Irritating to eyes and skin.
R43: May cause sensitisation by skin contact.

Safety phrases: S24: Avoid contact with skin.
S37: Wear suitable gloves.
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).
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.

2.3. Other hazards

Other hazards: Product contains sodium nitrite. Methaemoglobin may be formed after severe exposure to sodium nitrite. Administer oxygen if there are signs of cyanosis.

PBT: This substance is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

SODIUM HYDROXIDE				
EINECS	CAS	CHIP Classification	CLP Classification	Percent
215-185-5	1310-73-2	C: R35	Skin Corr.1A: H314	<1%

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	10-30%

TRIETHANOLAMINE				
EINECS	CAS	CHIP Classification	CLP Classification	Percent
203-049-8	102-71-6	Xi: R36/38	-	1-10%

2-PHOSPHONOBUTANE-1,2,4-TRICARBOXYLIC ACID				
EINECS	CAS	CHIP Classification	CLP Classification	Percent
253-733-5	37971-36-1	Xi: R36	-	1-10%

A MIXTURE OF: 5-CHLORO-2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-O				
EINECS	CAS	CHIP Classification	CLP Classification	Percent
-	55965-84-9	T: R23/24/25; C: R34; Sens: R43; N:R50/53	Acute Tox.3: H331; Acute Tox.3: H311; Acute Tox.3: H301; Skin Corr.1B: H314; Skin Sens. 1: H317; Aquatic Acute 1: H400; Aquatic Chronic 1: H410	<1%

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. Consult a doctor.
- Inhalation:** Remove casualty from exposure, ensuring one's own safety whilst doing so. Consult a doctor.

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 irritation and redness. The eyes may water profusely.
- Ingestion:** There may be soreness and redness of the mouth and throat.
- Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.
- 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. 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 mixtures

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: Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent 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: 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 SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including and compatibilities

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

Suitable packaging: Polyethylene. Unsuitable packaging: metals and alloys.

7.3. Specific end use(s)

Specific end uses(s): Corrosion inhibitor.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

SODIUM HYDROXIDE

Workplace exposure limits:			Respirable dust:	
	8 hour TWA:	15 min. STEL:	8 hour TWA	15 min. STEL:
UK	2 mg/m ³	2 mg/m ³	-	-

A MIXTURE OF: 5-CHLORO-2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-O

Workplace exposure limits:			Respirable dust:	
UK	0.05 mg/m ³	-	-	-

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: Pale yellow

Odour: Barely perceptible odour

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: Soft metals (aluminium, zinc etc) 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
Irritation	OPT DRM	Hazardous: calculated
Sensitisation	DRM	Hazardous: calculated

Symptoms / routes of exposure

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

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing and wheezing.

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

14.1. UN Number

UN Number: UN3287

14.2. UN Proper shipping name:

Shipping name: Systemsafe-IC

14.3. Transport hazard class(es)

Transport class: 6.1

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 2

IMDG seg. Group: 12 Nitrites

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 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.
H311: Toxic in contact with skin.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H331: Toxic if inhaled.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
R8: Contact with combustible material may cause fire.
R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.
R25: Toxic if swallowed.
R34: Causes burns.
R35: Causes severe burns.
R36/38: Irritating to eyes and skin.
R36: Irritating to eyes.
R43: May cause sensitisation by skin contact.
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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.