Kamco
Solutions to scale

SCALEBREAKER
descaling chemicals

For fast and effective removal of hard water deposits, rust, and scale

Applications include:

- Boilers and steam generators
- Combination boilers and water heaters
- Condensers and chillers
- Heat exchangers and calorifiers
- Injection moulding and extrusion machines
- Catering equipment
- Cooling towers and evaporators
- Heating and cooling pipework

Descaling chemicals

SCALEBREAKER SR DESCALING CRYSTALS FOR LIMESCALE DEPOSITS.	SCALEBREAKER FX DESCALE LIQUID FOR RUST & LIMESCALE DEPOSITS.	SCALEBREAKER HD HIGH STRENGTH DESCALE LIQUID FOR RUST & LIMESCALE DEPOSITS	SCALEBREAKER CG FOOD GRADE DESCALING CHEMICAL.
Safe to handle and store, but a strong acid when dissolved in water. Non fuming. Safe to use with steel, stainless steel, cast iron, copper brass, aluminium, PVC, polythene, propylene and most plastics / rubbers. Dissolves up to 50% of its own weight of scale.	Descaling liquid for pipework, radiators, heating & cooling systems and equipment with either rust and limescale deposits. Dissolves iron oxides at ambient temperatures. Non fuming. Safe to use with steel, stainless steel, cast iron, copper brass and most plastics / rubbers.	Powerful and economic liquid for use in cleaning heavily scaled equipment, where speed and high solvency power are critical. Rapidly dissolves limescale, and rust. Contains wetting agents to penetrate heavy deposits. Safe to use with steel, cast iron, copper, brass, and most plastics.	Biodegradable crystals for solution in water. Very safe to handle and store. Removes limescale deposits from equipment used for food preparation and catering. Non fuming and non toxic. Safe to use with steel, stainless steel, cast iron, copper, brass, aluminium and most plastics.
Kamco descaling chemicals are comprehensively inhibited to prevent corrosion of equipment being descaled, and incorporate a red to yellow pH colour change to give a visual check on solution strength.			

Other chemicals and products using during descaling

NEUTRALISING CRYSTALS	FOAMBREAKER ANTI-FOAM LIQUID	ZnI INHIBITOR	pH PAPER
A crystalline powder for solution in water, to neutralise descaling chemicals before disposal. Also used as a 0.5% solution after descaling, to neutralise any residual acidity.	A concentrated liquid additive to prevent excessive foaming when descaling, and to suppress existing foam.	Booster inhibitor for use with SCALEBREAKER SR solution to allow descaling of galvanised equipment.	to check strength of chemicals during descaling and after neutralisation.

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Scalebreaker descaling chemicals

Usage rates, technical characteristics, and packaging							
	SCALEBREAKER descaling chemicals				**Neutralising Crystals**	**Foambreaker antifoam**	**ZnI booster inhibitor**
	SR	**FX**	**HD**	**CG**			
Usage rate:	25-150 gm per litre water	10 to 20% in water	10 to 15% in water	50-150 gm per litre water	1 to 5% in water	ca. 10 ml per 50 litre of solution	3% by volume of solution
Appearance:	Orange/pink crystals	Pink/red liquid	Pink/red liquid	White crystals	White crystals	Creamy liquid	White crystals
Odour:	slight sulphurous	sweet	typical HCl	none	none	none	amine odour
Density @ 20°C:	ca. 1.3 g/ml	ca. 1.28 g/ml	ca. 1.17 g/ml	ca. 1.5 g/ml	ca. 1.25 g/ml	ca. 1.0 g/ml	ca. 1.05 g/ml
pH of 10% solution.	<0.5	<0.9	<0.1	<1.7	>12.5	ca. 7.0	n/a
Solubility @ 20°C:	22 gm/lt	infinite	infinite	>500 gm/lt	21 gm/lt	infinite	>30 gm/lt
Max. temp:	70°C	70°C	70°C	70°C	n/a	n/a	70°C
Packaging:	6 x 2.5 kg 15 kg pails	4 x 5 litre 10 lt drums	4 x 5 litre 10 lt drums	6 x 2.5 kg 15 kg pails	20 x 100gm tubes 6 x 2.5 kg 15 kg pails	1 litre dispenser pack with measure	450 gm pack to treat 15 kg of SR crystals.

General usage and application notes:

As a general guide, the rate at which deposits are dissolved increases with higher solution temperatures. Lower Scalebreaker use concentrations will require higher water temperatures for best effect.

The prepared solution may be used to soak the equipment to be descaled and cleaned, although the process is significantly faster when the solution is circulated vigorously by means of a suitable pump, such as Scalebreaker tank mounted pumps.

When limescale is being dissolved, carbon dioxide gas is evolved, and may cause foaming, dependent on the amount of scale present. Allowance should be made for the volume of foam when descaling commences. Should this be a problem, add Foambreaker at the recommended dosage.

Descaling may be considered complete when there is no further evolution of carbon dioxide, seen as bubbling in the solution, or in the return hose to a pump, but the Scalebreaker solution is still pink. If deposits have not been completely removed, and yet the solution has changed colour to amber/yellow, either add further Scalebreaker, or repeat the cleaning process.

After the descaling operation, drain the Scalebreaker solution, neutralise with Neutralising Crystals, and dispose of safely. Rinse or flush the descaled equipment thoroughly with clean water.

CAUTION: Scalebreaker chemicals and their solutions are acidic, and therefore suitable protective clothing, gloves, and goggles, should be worn.
Refer to appropriate Material Safety Data Sheet before use. These are available from Kamco.

CAUTION: When descaling with any acid, there is a possibility of flammable hydrogen gas being evolved, and the working area should be well ventilated. Avoid smoking nearby, or any other means of ignition.

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Stockist: