POWDERED DESCALER

Corium Z76 is a powerful new descaler in concentrated powdered form which replaces muriatic or hydrochloric acids for use in removing scaling from boilers & tubes, water towers & pipes, steam generators, fire mains systems etc.

Corium Z76 is a scientifically effective blend of powdered concentrated acid, indicators and inhibitors which, when dissolved in water, replaces most other acids used in descaling operations. In addition, Corium Z76 contains special metal inhibitors which protect the metal parts coming into contact with it during use in its liquid state.

Corium Z76 offers substantial improvements in safety and economy of use compared to conventional liquid descaling acids.

ECONOMY

Powdered Corium Z76 offers substantial savings in handling, storage and shipping costs when compared to conventional acids. It is completely non-corrosive in powdered form and can be shipped as general cargo as opposed to conventional liquid acids which require special packing, handling and storage.

Muriatic acids average 30% concentration in packed and shipment-ready form while Corium Z76 comes in fully concentrated form. This results in substantial storage and shipment savings when using Corium Z76.

SAFETY

Conventional muriatic acids are hazardous to handle and, if spilt, can result in direct danger to handler/operators in the form of acid burns, and indirectly from the inhalation of acrid acid fumes. Spilt Corium Z76 can just be swept away! No corrosive burns or toxic fumes to contend with.

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EFFECTIVENESS

Corium Z76 offers improved economy, safety and effectiveness compared with conventional descaling acids and is especially efficacious for removing calcium scaling in water-operated heat exchange systems.

HOW TO APPLY

Corium Z76 is a concentrated powdered acid used for the descaling of water heat exchange systems. It is composed of sulfamic acid, corrosion inhibitors and indicators. Corium Z76 replaces dangerous muriatic acids and is an advance in safety properties, ease of handling, economy of use and effectiveness.

HOW TO APPLY

To obtain a solution strength of between 10 to 15%, add 1 lb. of Corium Z76 powder to every gallon of water in the heat exchange system. (Metric equivalent being 1 Kg of Corium Z76 to every 10 litres of water)

IMPORTANT NOTE:

Although Corium Z76 is non-corrosive in powdered form, when mixed with water it becomes active and the usual safety procedures covering the use and handling of corrosive materials should be strictly observed.

EASE OF USE

Corium Z76 contains a special indicator which eliminates the need to test the solution. As Corium Z76 loses its effective strength, it gradually turns to light yellow color. This simple visual indicator helps the operator maintain Corium Z76's descaling power.

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- Total Quality Maintenance

1801, Guardian House, 32 Oi Kwan Road, Wanchai, Hong Kong Tel: (852) 2577 5187 Fax: (852) 2577 3190 E-Mail: magna@magnagroup.com Web Site: <u>www.magnagroup.com</u>

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MATERIAL SAFETY DATA SHEET

DATE 01 Aug 2014

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name/Code	CORIUM Z76		
Company Identification		Distributor	
Omega Manufacturing Division, Magna Industrial Co. Limited, 1801, Guardian House, 32 Oi Kwan Road, Wanchai, Hong Kong.		Alshawi Trading, Block 351, Road 51, Bldg 20, Ma www.alshawitrading.com info@alshawitrading.com P.O.Box 33526	nama - Bahrain.
Telephone Fax	(852) 25775187 (852) 25773190	Telephone Fax	(973) 1755 0019 (973) 1755 5108

SECTION 2 - HAZARDS IDENTIFICATION

Corrosive product.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredients</u>	CAS Number	<u>Wt.%</u>	Classification
Sulfamic acid	5329-14-6	75-90	Xi;R36/38
Sodium hydrogensulphate	7681-38-1	10-20	Xi: R41

SECTION 4 - FIRST-AID MEASURES

Eye Contact: Flush with plenty of water for at least 15 minutes. Seek immediate medical attention.

Skin Contact: Wash thoroughly with soap and water. Obtain medical attention in case of skin irritation or other cause for concern.

Inhalation: Move patient to open air.

Ingestion: Do not induce vomiting. Seek immediate medical attention.

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SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing Media: Foam, carbon dioxide and dry chemicals.

Special Protective Equipment for Fire Fighters: Self-contained breathing apparatus with full face-piece.

Unusual Fire and Explosion Hazards: Decomposition products may include nitrogen oxides, sulphur oxides..

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Spillage: Transfer bulk of material into another container. Neutralizes with either sodium carbonate or bicarbonate. Absorb remaining residue with proper absorbents such as sand, vermiculite. Sweep up and dispose of in accordance with local and national regulations.

SECTION 7 - HANDLING AND STORAGE

Keep locked up and containers closed. Avoid contact with skin, eyes and clothing, wash thoroughly after handling. Wash clothing before reuse. Keep away from feed and food products. Keep out of reach of children. Never add water to this product.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Safety goggles Hand Protection: Rubber or plastic oil resistant gloves. Ventilation: Use under well ventilated conditions.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White solid Odour: Odourless pH: <1 Specific Gravity: 1.0 Vapour Pressure: N.A.

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Boiling Point: N.A. Melting Point: N.A. Flash Point: None Flammability: N.A. Evaporation Rate: N.A. Solubility in Water: Soluble

SECTION 10 - STABILITY AND REACTIVITY

Stable

Materials to Avoid: N.A.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute toxicity: Sulphamidic acid: LD50/oral/rat = 3160mg/kg

Inhalation: Exposure to decomposition products may cause a health hazard. Skin: Cause irritating Eyes: Severely irritating to eyes. Ingestion: Irritating to mouth, throat and stomach.

SECTION 12 - ECOLOGICAL INFORMATION

No ecological information is available at present.

SECTION 13 - DISPOSAL CONSIDERATIONS

Comply with all local and national regulations regarding disposal.

SECTION 14 - TRANSPORT INFORMATION

Proper Shipping Name: SULPHAMIC ACID. UN Number: 2967

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IATA Class: 8, Packing Group: III IMDG Class: 8, Packing Group: III

SECTION 15 - REGULATORY INFORMATION

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SECTION 16 - OTHER INFORMATION

R-phrases: R36/38 - Irritating to eyes and skin.
R41 – Risk of serious damage to eyes.
S-phrases: S24/25 - Avoid contact with skin and eyes
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S39 – Wear eye/face protection.

Remarks: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, express or implied, and we assume no responsibility for any loss, damage, or expense, direct or consequential, arising out of their use.