

1) Identification of the substance and company

| | | |
|---------------------------|---|---|
| Product Name: | Bio-Sol Descale | Product Code BSD |
| Synonyms (if any): | | |
| Supplied by: | SOLTECH, P.O. Box 442, North Shields, Tyne & Wear, NE30 2XR UNITED KINGDOM | Tel / Fax: +44 (0) 191 280 2093 e-mail: info@soltech.org.uk web: www.soltech.org.uk |

2) Composition & Information on Ingredients

Contains: Saprophytic micro organisms conforming to EC EFB Class 1 (Not causal agents in human illness) and sulphamic acid.

Components which may be Hazardous: Sulphamic acid

3) Hazards Identification

Irritating to eyes and skin.
Harmful to aquatic organisms.
May cause long term adverse effects in the aquatic environment.

4) First Aid Information

Inhalation: Keep the affected persons warm and at rest. Get prompt medical attention.
Skin Contact: Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.
Eye Contact: Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
Ingestion: NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! DO NOT INDUCE VOMITTING. Get medical attention immediately.

Immediate Treatment / Antidote:

Symptomatic treatment

Delayed Effects: Possibility of allergic reaction to dusts or micro organisms manifested as dermatitis or shortness of breath. Treat latter with anti histamine under medical supervision if symptoms persist

5) Fire Fighting Measures

Extinguishing Media: Water spray, fog or mist.
Unusual Fire & Explosion Hazards: May develop highly toxic or corrosive fumes if heated.
Hazardous Decomposition Products: Fire or high temperatures create: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx). Sulphurous gases (SOx).
Protective Measures in Fire: Self contained breathing apparatus.

6) Accidental Release Measures

Personal Precautions: Safety spectacles, gloves and protective clothing need to be worn.
Environmental Precautions: Drains must be covered to avoid sewer/river contamination. In case of major spillages alert the emergency services and local water authority.
Clean up Procedure: Avoid contact with skin or inhalation of spillage, dust or vapour. Wear necessary protective equipment. Absorb in vermiculite, dry sand or earth and place into containers.

7) Handling & Storage

Usage precautions: Avoid spilling, skin and eye contact. Avoid acids, moisture, and combustible materials.
Storage precautions: Keep in cool, dry, ventilated storage and closed containers. Store separated from: Acids.
Storage: Temperature Range: °5°C- 35°C. Corrosive storage.
Keep Away From: Alkalis, Acids, chlorine and metals
Suitable Storage Media: Paper, plastic. Avoid metal for long term storage. Corrosive storage.

8) Exposure Controls / Personal Protection

| Ingredient name | CAS No | STD | LT EXP (8 hrs) | ST EXP (15 mins) |
|------------------------|---------------|------------|-----------------------|-------------------------|
| Sulphamic Acid | 5329-14-6 | | 10 mg/m3 | |

Protective Equipment: Goggles, gloves and dust mask if exposed to dust.
Respirators: Use specified dust mask.
Protective Gloves: Use protective gloves made of: rubber, neoprene or PVC
Eye Protection: Wear approved chemical safety goggles where eye exposure is reasonably probable.
Hygienic Work Routines: Wash at the end of work and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated.

9) Physical & Chemical Properties

| | |
|---------------------------------|---|
| Appearance: | Solid. |
| Colour: | Off white. |
| Odour: | No characteristic odour. |
| Solubility description: | Soluble in water. Aqueous solutions are acidic. 17g/100mls water. |
| Boiling Point: | Microbes are destroyed above 50 °C. Decomposes above melting point. |
| Melting Point: | 190°C |
| pH: | 4.2-4.6 |
| Chemical Synonyms: | Amidosulphonic acid |
| Molecular Mass: | 97.1 |
| Vapour Density: | N/A |
| Freezing Point °C: | 206 °C |
| Viscosity: | Not applicable |
| Lethal Dosage: | 316mg/Kg(rat) |
| Specific Gravity @ 20°C: | 2.12 H2O=1 |
| Vapour Pressure: | Not applicable |

10) Stability & Reactivity

| | |
|--|--|
| Stability: | Normally stable. Avoid: Moisture. |
| Conditions to avoid: | Acids, Alkalis, chlorine nitrites, metals and others |
| Hazardous Decomposition Products: | Fire or high temperatures create: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx). Sulphurous gases (SOx). |

11) Toxicological Information

| | |
|---------------------------------|--|
| Toxic Dose 1 –LD50L: | 3,160mg/kg (oral rat) |
| Health Hazards:: | Chronic exposure can result in defatting and irritation of the skin and possible dermatitis. The micro organisms are all saprophytes. The micro-organisms may effect subjects sensitive to allergies. |
| General Health Warnings: | May cause severe irritation. Irritating to eyes and skin. Repeat exposure may cause chronic eye irritation. Repeated exposure may cause chronic upper respiratory irritation. Contact with concentrated chemical may cause severe skin damage. |
| Medical symptoms: | Irritation of eyes and mucous membranes and skin. May cause discomfort in swallowed. |

12) Ecological Information

| | |
|-------------------------------|---|
| Environmental Hazards: | Will degrade dead organic matter . Will enhance activity in waste water treatment plant. Moderately toxic to aquatic life. |
| Degradability: | The mineral substrate is not bio degradable |
| Aquatic Toxicity: | High concentrations in receiving water will injure aquatic life due to pH. Harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment. |

13) Disposal Considerations

| | |
|-------------------|---|
| Substance: | Do not activate bulk powder by adding water. Keep dry and collect for use as directed or dispose in accordance with local waste disposal regulations. |
| Container: | Store in dry conditions in plastic container. Use special disposal reference nooks for detailed procedures. Refer to Croner's. Check disposal regulations with local authority. |

14) Transport Information

Label for Conveyance:



| | | | |
|---------------------------------|-------------------------------|--------------------------|--------|
| Road: | | ADR ITEM No: | 16 (c) |
| UN No: | 2967 | Hazchem Code: | 2Z |
| Hazard Class (ADR): | Class 8: Corrosive Substances | | |
| ADR Label No: | 8 | | |
| Rail: | | | |
| Rail Transport Class No: | 8 | Rail Road PT: | 16(c) |
| Sea: | | | |
| Sea Transport Class No: | 8 | IMDG Page No: | 8229 |
| Sea Pack GR: | III | EmS No: | 8-08 |
| MFAG Table No: | 700 | Marine Pollutant: | No |
| Air: | | | |
| Air Transport Class No: | 8 | Air Pack GR: | III |

15) Regulatory Information

The below refers to the sulphamic acid in the product.

Label for Supply:



IRRITANT

| | |
|------------------------|--|
| Label Name: | Bio-Sol Descale |
| Hazard Symbols: | Xi - Irritant |
| Risk Phrases: | R36/38 Irritating to eyes and skin R-52 Harmful to aquatic organisms. R-53 May cause long term adverse effects in the aquatic environment. |
| Safety Phrases: | S (2) Keep out of reach of children S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S-28 After contact with skin wash immediately with plenty of water. S-61 Avoid release to the aquatic environment. |
| E.C. No: | 226-218-8 |

16) Other Information

- 1 HSE Guidance Note EH 40 Occupational Exposure Limits (Latest Edition)
- 2 ACGIH (Threshold Limit Values and Biological Exposure Indices) 1985-86
- 3 Classification, Packaging and Labelling of Dangerous Substances Regulations 1984
- 4 IMO Reports and Studies No 35 (The Evaluation of Hazards of Harmful Substances Carried by Ships) 1989
- 5 IMDG Code (International Maritime Dangerous Goods Codes) 1990
- 6 Control of Substances Hazardous to Health Regulations (S1 1988/1657)

This material is usually used for : The maintenance of clear, scale free, odour free urinal and shower/bath drains

Revision date: 26/06/01

Micro organisms are activated by moisture, keep humidity below 2%

The above information is based upon the state of our knowledge of the product and the information supplied by component manufacturers at the time of writing. No warranty is implied with respect to the quality or the product. The user should satisfy himself that the product is entirely suitable for the intended use.