MATERIAL SAFETY DATA SHEET

Section 1  IDENTIFICATION OF THE MATERIAL AND SUPPLIER

COMPANY                  Delshine Chemicals
ABN NUMBER               78-805-588-343
ADDRESS                  Unit 1 / 30 Prindiville Drive, Wangara
FACSIMILE NUMBER         (08) 9309 4334
TELEPHONE NUMBER         (08) 9309 4222
EMERGENCY TELEPHONE      041 992 7281 (After hours)
EMAIL                    delshine-chemicals@bigpond.com
WEB SITE                 www.delshinechemicals.com

BRAND NAME – BORE STAIN CLEANER
TRADE NAME – BORE STAIN CLEANER
SHIPPING NAME (section 14) CORROSIVE LIQUID TOXIC N.O.S
(CONTAINS HYDROFLURIC ACID)
USE – REMOVAL OF BORE WATER STAINS ON BRICKS, WALLS, PAVING, GLASS ETC
RESTRICTIONS – INCOMPATABLE WITH ACIDS, ALKALIS AND OXIDISING AGENTS

Section 2  HAZARDS CLASSIFICATION / INDENTIFICATION

CLASSIFIED AS: HAZARDOUS – According to the criteria of NOHSC
UN NUMBER: 2922

RISK PHRASES:
R20 / 21 / 22 Harmful by inhalation, in contact with skin and if swallowed.
R31 Contact with acids liberates toxic gas
R36/37/38 Irritating to eyes, respiratory system and skin.
R65 Harmful may cause lung damage if swallowed

SAFETY PHRASES:
S1 / S2 Keep locked up and out of reach of children.
S7 / 9 Keep container tightly closed and in a well ventilated place.
S23 Do not breathe vapour
S25 Avoid contact with eyes
S26 In case of contact with eyes rinse immediately with plenty of water and see medical advice.
S27 Take off immediately all contaminated clothing
S36 / 37 / 39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell seek medical advice immediately (show label whenever possible)
S57 Use appropriate containment to avoid environmental contamination
S61 Avoid release to the environment refer to Material Safety Data Sheet
Section 3  COMPOSITION / INFORMATION OF INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Entity</th>
<th>CAS No.</th>
<th>Proportion (% mass)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrofluoric Acid</td>
<td>7664-39-3</td>
<td>1</td>
</tr>
<tr>
<td>Phosphoric Acid</td>
<td>7664-38-2</td>
<td>8.5</td>
</tr>
<tr>
<td>Nitric Acid</td>
<td>7697-37-2</td>
<td>3</td>
</tr>
</tbody>
</table>

Section 4  FIRST AID MEASURES

Poisons Information Centre’s in each State capital city can provide additional assistance for scheduled poisons. Ring 13 11 26 at once Aust.

**Ingestion**: If swallowed DO NOT induce vomiting.

**Eye Contact**: If in eyes hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

**Skin Contact**: If skin contact occurs, immediately remove contaminated clothing. Flush skin under running water for 15 minutes. Then apply calcium gluconate gel. Contact the Poisons Information Centre.

**Inhalation**: Remove victim from exposure – avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. For all but the most minor symptoms arrange for patient to be seen by a doctor as soon as possible, either on site or at the nearest hospital.

Notes to physician – Treat symptomatically. Can cause corneal burns.

**First Aid Facilities**: Ensure an eye bath and safety shower are available and ready for use.

Section 5  FIRE FIGHTING MEASURES

**Specific Hazards**: Non combustible material.

**Fire fighting further advice**: Reaction with metals will produce flammable hydrogen gas, which will burn if ignited. Decomposes on heating, emitting toxic fumes including those of nitrous oxides and hydrogen fluoride. Fire fighters to wear self contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

**Suitable extinguishing media**: Water fog (or if unavailable fine water spray) foam dry agent (carbon dioxide, dry chemical powder)

HAZCHEM CODE: 2X
Section 6  ACCIDENTAL RELEASE MEASURES

Clear area of all unprotected personnel. Wear protective equipment to prevent skin and eye contamination. Contain using sand and soil – prevent runoff into drains and waterways. Use absorbent (soil or sand, inert materials, vermiculite). Neutralise carefully with lime. Collect and seal in properly labeled containers for disposal. If contamination of sewers or waterways has occurred advise the local emergency services.

Section 7  HANDLING AND STORAGE

Storage: Store in cool, well ventilated area out of direct sunlight and away from foodstuffs, acids alkalis and oxidizing agents.

Handling: Always wash hands after handling prior to eating, drinking, smoking or going to the toilet.

Section 8  EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits.
No value assigned for this specific materials by the National Occupational Health and Safety Commission (Worksafe Australia)
However, Exposure standards for constituent: Fluoride (as F) 8 hr TWA = 2.5mg/m3
Nitric Acid TWA = 2ppm (5mg/m3)
STEL = 4ppm (10mg/m3)

As published by the National Occupational Health and Safety Commission (Worksafe Australia)
TWA – The time weighted average airborne concentration over an 8 hour working day, for a 5 day working week over an entire working life.

Engineering Measures – Ensure ventilation is adequate and that air concentration of fluoride and nitric acid are controlled below exposure standards. Use with local exhaust ventilation.

Personal Protection Equipment: Wear overalls, chemical goggles and impervious gloves. Avoid generating and inhaling mists. If mists exist wear respirator meeting requirements of AS/NZS 1715 and AS/NZS 1716. Wash contaminated clothing and other personal protection equipment before storage or reusing.

ENGINEERING CONTROL

Section 9  PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE – clear to opaque amber liquid
PH 1.07
BOILING POINT °C - not available
FREEZING POINT °C – not available
SPECIFIC GRAVITY 1.075
ADDITIONAL INFORMATION

ODOUR- Pungent
VAPOUR PRESSURE not available
VAPOUR DENSITY not available
SOLUBILITY IN WATER 100%
Section 10  
STABILITY & REACTIVITY

**Stability** – Bore Stain is stable under normal ambient conditions of temperature and pressure.

**Hazardous Polymerisation** – Will not occur.

Section 11  
TOXICOLOGICAL INFORMATION

**Main Symptoms** – No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled are:

**Acute**

**Ingestion** : Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.

**Eye Contact** : Severe eye irritant. Contamination of the eyes can result in permanent injury. Corrosive to eyes: contact can cause corneal burns.

**Skin Contact** : Contact with skin will result in severe irritation. Repeated or prolonged skin contact may lead to irritant contact dermatitis. Corrosive to skin – may cause skin burns.

**Inhalation** : Inhalation of mists will result in respiratory irritation and possible harmful corrosive effects. Inhalation of mists at elevated temperatures will increase symptoms.

**Chronic** : Chronic fluoride poisoning is possible. Intake of more than 6mg of fluoride per day results in fluorosis symptoms including weight loss, brittle bones, anaemia, weakness and stiffness of the joints.

**Toxicity Data** : No data available for ALLY CLEAN. However for major components the following information is available.

1. **Hydrofluoric Acid**
   
   Acute inhalation toxicity data – LC50 RAT 5 min = 4970 ppm as F  
   LC50 RAT 1 hr = 1310 ppm as F  
   LC50 MONKEY 1 hr = 1774 ppm as F

2. **Nitric Acid** –  
   Oral LD50 = 430 mg/kg ( HUMAN )  
   - Oral LDLO = 430 mg/kg ( HUMAN )  
   - Inhalation LC50 = 49 mg/m3 ( RAT )

3. **Phosphoric Acid.**  
   Acute oral toxicity : LD50 ( Rat ) – 3500 mg/kg ( slightly toxic ). Acute dermal toxicity : LD50 ( Rabbit )– >1260 mg/kg ( slightly toxic ). Summary of toxicology : Phosphoric acid mist is an irritant to the eyes upper respiratory tract and skin. The solid specially irritating the skin in the presence of moisture. Unacclimated workers could not endure exposure to fumes of phosphorus pentoxide the anhydride of phosphoric acid ) at a concentration of 100 mg/m3 exposure to concentrations between 3.6 and 11.3 mg/m3 produced coughing. Concentrations of 0.8 to 5.4 mg/m3 were noticeable but not uncomfortable. There is no evidence that phosphorous poisoning can result from contact with phosphoric acid. The risk of pulmonary oedema resulting from the inhalation of mist or spray is remote. A dilute solution buffered to ph 2.5 caused a moderate brief stringing sensation but not injury when dropped in the human eye. A 75% solution will cause severe skin burns.

Section 12  
ECOLOGICAL INFORMATION

Avoid contaminating waterways.
Section 13  DISPOSAL CONSIDERATIONS

Refer to State Land Waste Management Authority. Empty containers must be decontaminated. Can be dissolved carefully in water and greatly diluted or carefully neutralized with lime and flushed to drain with copious amount of water. Normally suitable for disposal at approved land waste site.

Section 14  TRANSPORT INFORMATION

UN NUMBER : 2922

UN PROPER SHIPPING NAME : Corrosive Liquid, Toxic NOS
(Contains Hydrofluric Acid)

CLASS: 8  PACKING GROUP: 11  HAZCHEM CODE: 2X
SUBCLASS: 6.1  POISONS SCHEDULE 6  ERG: 37

POISONS SCHEDULE (AUST) TOXIC SUBSTANCE (NZ) S6 HAZARD ACCORDING TO CRITERIA OF WORKSAFE AUSTRALIA

Hazard Category: Harmful
Risk Phrases:
R20/21/22- Harmful by inhalation, in contact with and if swallowed.
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R65  Harmful may cause lung damage if swallowed

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S61  Avoid release to the environment refer to Material Safety Data Sheet
**Section 16  OTHER INFORMATION**

Literary Reference: 1 MSDS – Ammonium Bifluoride – orica – September 2003  
2 MSDS – Nitric Acid – Redox – February 2005  
3 MSDS – Phosphoric Acid – Redox – February 2005  

DATE OF LAST REVISION OF MATERIAL SAFETY DATA SHEET:  
17th January 2014  

CONTACT POINT – Les Buss – TELEPHONE (08) 9309 4222  

AUTHORISATION FOR ISSUE _______________  DATE _____/_____/_____

Les Buss  

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END OF M.S.D.S  
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