

# MATERIAL SAFETY DATA SHEET

## DYNAMIC DESCALER

### 1. IDENTIFICATION OF THE PRODUCT AND SUPPLIER

#### 1.1 Product

Dynamic Descaler : Cleaning and descaling compound.

#### 1.2 Use of the substance

Lime Scale, Calcareous Growth and rust remover.

#### 1.3 Manufacturer and Supplier

##### Manufactured : Precision Dynamics Inc

P.O. Box 1595

Burleson

Texas 76097

USA.

Phone : 00-1-817-447-9898

Emergency Phone : 00-1-352-323-3500

##### Supplier : Encotec Co.,Ltd.

71/296 Soi.Ramkhamhaeng 164, Ramkhamhaeng Rd.,Minburi, Bangkok 10510

Telephone : +66 2 372 7320-1

Fax : +66 2 372 7322

E-mail : info@encotecthai.com

Emergency call : +66 84 452 0077

### 2. COMPOSITION/INFORMATION ON INGREDIENTS.

<u>MATERIAL OR COMPONENT</u>	<u>Conc.</u>	<u>CAS No.</u>
Hydrogen Chloride, Aqueous	9%	7647-01-0

### 3. HAZARDS IDENTIFICATION

Not Classified under EC Directives.

### 4. FIRST AID MEASURES

**Eye Contact** : On contact with eyes, rinse immediately with plenty of running water for at least 15 minutes. If irritation persists seek medical advice.

**Ingestion** : If swallowed drink water or milk of magnesia. Do not induce vomiting. Seek medical advice showing the container/label or this safety data sheet.

**Skin Contact** : Wash affected area with plenty of water. Remove and wash contaminated clothing. Seek medical attention if irritation occurs.

**Inhalation** : Remove affected person to fresh air. Apply resuscitation if necessary. If irritation persists, seek medical attention.

**Advice to Doctor** : Treat symptomatically

**First Aid Facilities** : Eye wash facilities should be provided

### 5. FIRE-FIGHTING MEASURES

**Flammability** : Non Flammable

**Fire and Explosion** : Product is Non Flammable. If product involved in fire, wear self-contained breathing apparatus, protective clothing and eye protection for fire fighting. Use water fog, water or foam to cool intact containers and nearby storage areas.

**Extinguishing** : Non-Flammable

**Hazchem Code** : None Allocated

## 6. ACCIDENTAL RELEASE MEASURES

**Spillage** : Small spills can be mopped up using sand or spill control granules. If spilt in bulk, wear splash-proof goggles, PVC/rubber gloves, coveralls and rubber boots. Neutralize with large amounts of water and (if available) diluted sodium carbonate. Prevent spill entering drains or waterways until neutralized.

## 7. HANDLING AND STORAGE

**Handling** : Use safe work practices to avoid eye and skin contact. Observe good personal hygiene. Prohibit eating, drinking or smoking in contaminated areas. Wash hands before eating.

**Storage** : store in cool, dry, well-ventilated area, removed from oxidising agents, heat sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Large storage areas should have appropriate ventilation systems.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ventilation** : Ensure adequate natural ventilation.

Exposure Standards: An exposure standard has not been allocated to this product.

**PPE** : Wear splash-proof goggles and PVC or rubber gloves. When using large quantities or where heavy contamination is likely, wear coveralls.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Boiling Point</b> :	108°C
<b>Solubility in Water</b> :	Soluble
<b>Specific Gravity (water=1)</b>	1.06
<b>Vapour Pressure</b> :	20 mmHg @ 20°C
<b>Appearance</b> :	Amber
<b>Odour</b> :	Citrus like smell
<b>pH</b> :	< 2
<b>Physical State</b> :	Liquid
<b>Flammability</b> :	Non Flammable

## 10. STABILITY AND REACTIVITY

**Stability** : Product is stable in normal use

**Reactivity** : Avoid mixing with alkaline products.

Decomposition Products: None.

## 11. TOXICOLOGICAL INFORMATION

**Health Hazard Summary** : Non-Toxic Irritant. This product may present a hazard with direct eye contact, or with prolonged and repeated skin contact. Chronic effects are not anticipated.

**Eyes** : Irritant. Contact may result in irritation, pain and redness.

**Inhalation** : Low Irritant. Over exposure at high levels may result in mucous membrane irritation of the upper respiratory tract (i.e. nose and throat) and coughing. However, due to the low vapour pressure, adverse health effects are not anticipated under normal conditions of use.

**Skin** : Low Irritant. Prolonged and repeated contact may result in drying and de-fatting of the skin with rash and dermatitis.

**Ingestion** : Non-Toxic Irritant. Ingestion of large doses may result in nausea, vomiting and gastrointestinal irritation.

**Toxicity Data** : Hydrogen Chloride Aqueous (Dilute Hydrochloric Acid).

**Carcinogen** : Does not contain any material known to cause cancer

## 12. ECOLOGICAL INFORMATION

**Environment** : This product is biodegradable and will normally be neutralised during use.

## 13. DISPOSAL CONSIDERATIONS

**Disposal Considerations** : The expended/neutralised product is biodegradable and is suitable for disposal via sewerage systems. Prior authorisation should be sought from the relevant water authority. Alternatively absorb with sand, vermiculite or similar and dispose of to an approved landfill site as a non-hazardous by-product.

## 14. TRANSPORT INFORMATION

Not Classified under EC Directives as dangerous goods for transportation by Road, Rail or Sea.

**Transport** :

**Hazard Class** : N/A (Not Classified under EC Directives)

**UN Number** : N/A (Not Classified under EC Directives)

**Packing Group** : N/A (Not Classified under EC Directives)

**Danger Labels** : Xi (Irritant)

**Hazard identification** : N/A (Not Classified under EC Directives)

**Transport Category** : N/A (Not Classified under EC Directives)

## 15. REGULATORY INFORMATION

**Hazard** : Hazard Group A

**Risk Phrases** : R22, R36/38

**Safety Phrases** : S2, S24/25, S26, S37/39, S41, S43 (SCBA, WATER, WATER FOG, FOAM), S62

**Danger labels** : Xi (Irritant)

## 16. OTHER INFORMATION

This product is intended for industrial use only and should be used in accordance with the manufacturer's instructions.

The product should not be circulated for more than 4 hours (most cleaning cycles will require 2 – 4 hours). The product should be used only at normal ambient temperatures (0 – 30°C). Higher temperatures may increase risk to personnel.

.....