

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006, Article 31

SECTION 1: Identification of the substance/mixture and of the Company/undertaking

1.1 Product Identifier

Product Name: Dynamic Descaler

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Industrial removal of Lime Scale and Calcerous Growth from industrial and marine plant

1.3 Details of the supplier of the safety data sheet

Manufacturer: Precision Dynamics Inc
P.O. Box 1595
Burleson
Texas 76097
USA
Phone: 00-1-817-447-9898
Emergency Phone: 00-1-352-323-3500

Importer/UK Supplier: Dynamic Descaler UK Ltd.

Address: Unit 1, Cory Close
Wainhouse Corner
Bude
Cornwall
EX23 0AR

Telephone: 01579 384584

E-mail: sales@dynamicdescaler.co.uk

Date of Issue: 4th April 2019

1.4 Emergency telephone numbers

Supplier:

+44 (0) 1579 384584 (Mon – Fri 08:30 – 17:00)

National Help Desk:

Health and Safety Executive (HSE) Chemicals Regulation Directorate
4N.G Redgrave Court, Merton Road, Bootle, Merseyside. L20 7HS
Telephone: +44 151 951 3317
Email: biocidesenquiries (at) hse.gsi.gov.uk

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification under EC Directives EC No 1272/2008 (CLP):

For concentration limits up to 10%. Normal concentration of mixture is 9%

Eye irritation Cat 2

Skin irritation Cat 2

Specific target organ toxicity (STOT) Single exposure: Category 3

Hazard statements:

H319: Causes serious eye irritation

H335: May cause respiratory irritation

Precautionary statements:

P202: Do not handle until all safety precautions have been read and understood

P261: Avoid breathing fumes or spray

P271: Use only outdoors or in a well ventilated area

P264: Wash hands thoroughly after using product

P280: Wear protective gloves and goggles

P302 + P352: If on skin, wash with plenty of soap and water

P304 + P340: If inhaled, remove victim to fresh air and keep at rest in a comfortable position for breathing

P305 + P351 + P338: If product gets into the eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P301 + P313 + P330: If swallowed, rinse mouth and get medical attention. DO NOT induce vomiting

P312: If victim feels unwell or irritation persists, get medical advice/attention

2.2 Label elements

Labelling under EC Regulation (EC) No 1272/2008 (CLP)

Hazard pictograms



Signal word: **Warning**

Hazard statements:

Causes serious eye irritation
May cause respiratory irritation

Precautionary statements:

Do not handle until all safety precautions have been read and understood
Avoid breathing fumes or spray
Use only outdoors or in a well ventilated area
Wash hands thoroughly after using product
Wear protective gloves and goggles
If on skin, wash with plenty of soap and water
If inhaled, remove victim to fresh air and keep at rest in a comfortable position for breathing
If product gets into the eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
If swallowed, rinse mouth and get medical attention. DO NOT induce vomiting
If victim feels unwell or irritation persists, get medical advice/attention

Hazardous components which must be listed on the label:

CAS No: 7647-01-0 Hydrogen chloride, aqueous solution (9%)

2.3 Other hazards

This substance is not considered to be persistent, bioaccumulating or toxic (PBT)

SECTION 3: Composition/information on ingredients

3.2 Mixture

Chemical nature: Acid based mixture in water, concentration 10% or less

Hazardous Components:

Chemical Name CAS No. EC-No. REACH Registration No:	Classification (Regulation EC No. 1272/2008)	Concentration (%)
Hydrogen Chloride CAS 7647-01-0 EC-No. 231-595-7 REACH In progress	Eye Irritation Cat 2 Skin Irritation Cat 2 STOT (SE) Cat 3	<9.0

SECTION 4: First Aid measures

4.1 Description of first aid measures

General advice: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Eye contact: Flush eyes immediately with large quantities of water for at least 15 minutes holding eyelids apart to ensure flushing of the entire surface. Washing eyes within one (1) minute is necessary to achieve maximum effectiveness. Remove contact lenses if present and easy to do. Continue rinsing. If irritation persists, get medical attention.

Skin contact: Wash with plenty of soap and water for 15 minutes. Remove contaminated clothing and wash before reuse. Seek medical attention if symptoms are present.

Ingestion: If swallowed, do not induce vomiting. Give large quantities of water or milk of magnesia; if available, several glasses of milk.

Inhalation: Remove to fresh air. If person is not breathing, administer resuscitation. Seek medical attention if loss of consciousness occurs or breathing stops. Seek medical attention if irritation persists.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No information available

4.3 Indication of any immediate medical attention and special treatment

Treatment: No information available.

SECTION 5: Fire-fighting measures

This product is non-flammable.

5.1 Extinguishing Media:

N/A to product itself. Water spray, foam, CO₂ may all be used if suitable for the primary fire.

5.2 Special hazards arising from the substance:

None.

5.3 Advice for fire-fighters:

Use approved self-contained breathing apparatus in areas where this material is involved in a fire.

Protective clothing for skin and eye protection should be worn

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use appropriate personal protection—rubber or nitril gloves, goggles or safety glasses. If spilt in bulk, wear splash-proof goggles, PVC/rubber gloves, coveralls and rubber boots.

6.2 Environmental precautions:

Small spills can be mopped up using sand or spill control granules. Neutralize with large amounts of water and (if available) diluted sodium carbonate. Prevent spill entering drains or waterways until neutralized.

6.3 Methods and materials for containment and cleaning up

May be disposed to normal drainage once neutralized.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Good industrial hygiene practices should be adhered to when storing and handling this product. Avoid contact with undiluted product. This material when used or completely spent is non-hazardous. It neutralizes itself in use.

7.2 Conditions for safe storage, including any incompatibilities

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.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

None applicable

8.2 Exposure controls

Engineering measures

Product should be used in purpose-designed equipment that does not expose the operator in normal use. Circulation should only be started once all pipework connections have been made and tested.

Provide adequate general ventilation.

Personal protective equipment

Respiratory Protection: None required under normal conditions with adequate general ventilation.

Hand Protection: Acid resistant gloves such as rubber or nitril should be worn..

Eye Protection: Safety goggles or a full face visor should be worn while mixing or dispensing the product.

Skin Protection: Standard work clothes (overalls) should be worn. Wash soiled clothing in soap and water and dry before reuse. Eyewash facilities should be accessible.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Amber coloured liquid.

Odour: Almond-like smell.

pH: < 2

Boiling Point: 108°C

Flash Point: N/A

Flammability: This product is not flammable

Explosive properties: N/A

Relative density (H₂O=1): 1.06

Vapour Pressure (mm. Hg): 20 Torr

Melting Point: Not Determined

Vapour Density (air=1): 1.27

Evaporation Rate: (Butyl Acetate=1) 2.0

Solubility in Water: Complete

SECTION 10. Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed

10.2 Chemical stability

Under normal conditions this product is stable.

10.3 Possibility of hazardous reactions

No dangerous reactions known in normal use

10.4 Conditions to avoid

Stable under recommended storage and handling conditions

10.5 Incompatible materials

Do not mix with alkaline products; this may cause a hazardous reaction.

10.6 Hazardous Decomposition Products:

None

SECTION 11. Toxicological information

11.1 Information on toxicological effects

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

Eye: Irritant. Exposure 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: No carcinogenic effects known.

SECTION 12. Ecological information

12.1 Toxicity

Acute aquatic toxicity: No information available

12.2 Persistence and degradability

This product is biodegradable. Once used, the product is neutralised and has no adverse effects on the environment.

12.3 Bioaccumulative potential

No information available

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvb assessment

This product contains no substance considered to be persistent, bioaccumulating or toxic.

12.6 Other adverse effects

No information available

SECTION 13. Disposal considerations

13.1 Waste treatment method:

This product is diluted and expended during use. It is recommended that it be pumped back into the delivery container and disposed of with non-hazardous by-products and production residues. Residues can also be disposed of through normal drainage and sewage treatment systems.

SECTION 14. Transport information

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

Transport:

UN Number:	NA (Not Classified under EC Directives)
UN Proper Shipping Name:	NA (Not Classified under EC Directives)
Hazard Class:	NA (Not Classified under EC Directives)
Packing Group:	NA (Not Classified under EC Directives)
Environmental Hazards:	NA (Not Classified under EC Directives)
Special precautions:	NA (Not Classified under EC Directives)
Transport in bulk:	NA under MARPOL 73/78 and IBC Code

SECTION 15. Regulatory information

15.1 Safety, health or environmental Regulations specific to the mixture

None applicable

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this mixture.

SECTION 16. Other information

This is the sixth issue of a Safety Data Sheet for Dynamic Descaler in the UK and is at Revision State 6.

Date of Issue: 4th April 2019

Dynamic Descaler MSDS Reference: Dynamic Descaler/2

Further information

This product is intended for industrial use by professional trained persons only.

Do not circulate this product for more than a four (4) hour period without consulting the manufacturer or your local representative. Most cleaning cycles can be accomplished within a two (2) to four (4) hour cycle. This material should be used only as directed.

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impossible to prepare a report, which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

However, the hazardous component is at a low concentration (less than 9%) and significant harm from exposure is unlikely provided the relevant precautions are taken.

Department issuing this safety data sheet

Seal Safety & Training Ltd. Rosedale House, North Tawton, Devon EX20 2DG

Tel/Fax: 01837 82341

Web: www.seal-safety.co.uk