

Impact!

DESCALER SERIES

IMPACT DESCALER HARD & PREMIER

Safety Data Sheet (SDS) — GHS Classification Sheet
English Version

PRODUCTS COVERED

IMPACT DESCALER PREMIER — for commercial & industrial use

IMPACT DESCALER HARD — for household & retail use

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1. Identification of the Chemical Product and of the Company

Product Identification

Product Name	IMPACT DESCALER PREMIER IMPACT DESCALER HARD
Product Type / Use	Acidic descaling agent for the removal of hard-water scale and mineral deposits
Manufacturer	Precision Dynamics, Inc.
Country of Origin	United States of America (U.S.A.)

Sole Distributor in Japan

Company	PROUP Co., Ltd.
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Recommended use: Removal of scale, lime, rust film and mineral deposits from equipment, tools and surfaces compatible with acidic cleaners.

Restrictions on use: Do not use on alkali-sensitive substrates, marble, natural stone, or materials that are attacked by acids.

2. Hazards Identification

GHS Classification of the Product

Hazard Class	Category
Flammable liquids	Not classified
Self-reactive substances and mixtures	Not classified
Pyrophoric liquids	Not classified
Self-heating substances and mixtures	Not classified
Oxidizing liquids	Not classified
Skin corrosion / irritation	Category 1
Serious eye damage / eye irritation	Category 1
Respiratory sensitization	Category 1
Skin sensitization	Not classified
Carcinogenicity	Not classified
Specific target organ toxicity — single exposure	Category 2
Specific target organ toxicity — repeated exposure	Category 2
Aspiration hazard	Not classified

Label Elements — Labelling (Regulation (EC) No. 1272/2008)

Hazard pictograms: GHS05 (Corrosion), GHS07 (Exclamation mark), GHS08 (Health hazard).

Signal word: DANGER

Product Characteristics and Precautions

Characteristics

The formulation uses ingredients selected to minimize damage to protein tissues. As a result, and unlike many general acid cleaners, the risk of strong protein-damaging irritation on brief skin contact is very low.

Precautions

- Wear gloves when using the product if any cuts or abrasions are present on the hands. Some users may experience a tingling sensation in the pores.
- Prolonged work, or use by persons with sensitive skin, may cause dryness, roughness, or cracked skin (chapping).
- Persons with sensitive skin are advised to wear gloves, protective clothing, or similar equipment so that the product does not remain in direct contact with the skin for extended periods.

Hazard Statements

H314 + H318 Causes severe skin burns and eye damage.

H332 + H334 Harmful if inhaled; may cause allergy, asthma symptoms or breathing difficulties if inhaled.

H371 May cause damage to organs (respiratory system).

H373 May cause damage to organs (respiratory system, teeth) through prolonged or repeated exposure.

H401 Toxic to aquatic life.

2. Hazards Identification (Precautionary Statements)

Prevention

- **P260 / P261** — Do not breathe dust / fume / gas / mist / vapours / spray; avoid such exposure.
- **P264** — Wash hands and any exposed skin thoroughly after handling.
- **P271** — Use only outdoors or in a well-ventilated area.
- **P273** — Avoid release to the environment.
- **P280** — Wear protective gloves / protective clothing / eye protection / face protection (recommended).
- **P284** — In case of inadequate ventilation, wear respiratory protection.

Response (First Aid)

- **P301 + P330 + P331** — IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- **P303 + P361 + P353** — IF ON SKIN (or hair): remove immediately all contaminated clothing. Rinse skin with water or shower.
- **P304 + P340** — IF INHALED: remove person to fresh air and keep comfortable for breathing.
- **P305 + P351 + P338** — IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do; continue rinsing.
- **P308 + P311** — IF exposed or concerned: call a POISON CENTER or doctor / physician.
- **P310** — If symptoms are severe, immediately obtain medical attention (see also Section 4).
- **P312 + P314** — Call a POISON CENTER or doctor / physician if you feel unwell; get medical advice / attention.
- **P342 + P311** — If experiencing respiratory symptoms: call a POISON CENTER or doctor / physician.
- **P363** — Wash contaminated clothing before reuse.

Storage

- **P404 + P410** — Store in a closed container. Protect from sunlight.

Disposal

- **P501** — Dispose of contents and container at an approved waste disposal facility. Discharge shall comply with applicable wastewater regulations.

Other Hazards

No additional information available.

3. Composition / Information on Ingredients

Substance / mixture: Mixture (chemical mixture)

Component (chemical name)	CAS No.	Weight %
Hydrogen chloride, aqueous solution (Hydrochloric acid) — hydrochloric-acid-based scale-removal complex	7647-01-0	9.00
tert-Butyldimethylsilyl chloride (TBDMS-Cl / TBS-Cl) — scale-removal accelerator*	18162-48-6	11.40
Tartrazine (C.I. Acid Yellow 23; FD&C Yellow No. 5) — acidic colourant	1934-21-0	0.03
Water	7732-18-5	79.57

* The CAS numbers listed in this section are those specified in the original Japanese SDS (7647-01-0, 18162-48-6, 1934-21-0, 7732-18-5). The English chemical names shown are the IUPAC / commonly accepted names corresponding to each CAS registry number.

To the best of the supplier's knowledge and at the concentrations shown, no additional components are present that would be classified as hazardous to human health or the environment. Should any additional information become available that requires classification as a hazardous substance, it will be disclosed in this section.

4. First-Aid Measures

Standard First-Aid Procedures

Inhalation

- Move the exposed person to fresh air.
- If the person has lost consciousness or has stopped breathing, obtain medical attention immediately.
- If symptoms persist, obtain medical attention without delay.

Skin Contact

- Wash thoroughly with plenty of water.
- Remove contaminated clothing and wash it before reuse.
- If symptoms persist, obtain medical attention without delay.

Eye Contact

- Rinse cautiously with water for several minutes.
- If contact lenses are worn and can be removed easily, remove them and continue rinsing; then obtain medical attention.

Ingestion

- Do NOT induce vomiting.
- Have the affected person drink a large volume of water, or several glasses of milk.
- Obtain medical attention.

5. Fire-Fighting Measures

Flash point	N/A (not applicable — non-flammable aqueous solution)
Flammability limits	N/A
Suitable extinguishing media	Water spray, foam, carbon dioxide (CO ₂)

Fire-Fighting Instructions

If the product is involved in a fire, use a NIOSH / MSHA-approved self-contained breathing apparatus (SCBA). The product itself is non-flammable.

Special Hazards Arising from the Substance

Wear appropriate skin and eye protection. There is no risk of explosion. Where possible, prevent fire-fighting water that has been in contact with the product from being released into waterways, sewers or drains, in order to avoid environmental contamination.

6. Accidental Release Measures

The product can generally be handled without protective equipment. However, because it removes skin oils, prolonged handling — or use by persons with sensitive skin — may cause dryness, roughness or chapping. Persons with sensitive skin are recommended to wear gloves, protective clothing or similar equipment so that the product does not remain in prolonged direct contact with the skin.

Procedures in Case of Leakage or Release

The product is biodegradable. Use appropriate personal protective equipment: rubber gloves and goggles or safety glasses. Wipe up the spill and neutralize with a large volume of water. Slowly add a sodium carbonate solution to any residue. The neutralizing solution is prepared by dissolving **4.5 kg of sodium carbonate in 19 L of water**. This procedure will normally bring the pH of the residue to between 5 and 8.

Personal Precautions, Protective Equipment and Emergency Procedures

Where release occurs indoors, ventilate thoroughly after treatment. Wear appropriate PPE during the work so that splashes do not contact the skin and any evolved gas is not inhaled. Work from the upwind side and evacuate persons located downwind. The use of appropriate PPE — rubber gloves, goggles or safety glasses — is recommended.

Environmental Precautions

Take care to prevent released product from entering rivers or other water bodies, and to prevent environmental impact. Do not allow wastewater to be discharged to the environment without appropriate treatment.

Containment, Clean-up Methods and Materials

No specific information available.

Prevention of Secondary Damage

Thoroughly wash contaminated objects and areas in accordance with applicable environmental regulations.

7. Exposure Controls / Personal Protection

Wear gloves when using the product if any cuts or abrasions are present on the hands. Some users may experience a tingling sensation in the pores. Prolonged handling, or use by persons with sensitive skin, may cause dryness, roughness or chapping. Persons with sensitive skin are recommended to wear gloves, protective clothing or similar equipment so that the product does not remain in prolonged direct contact with the skin.

Control Parameters — Occupational Exposure Limits

CAS No.	Component	OSHA PEL — TWA	ACGIH TLV	NIOSH — TWA
7647-01-0	Hydrogen chloride (HCl)	5 ppm	2 ppm	—

Exposure Controls

Engineering controls	When used indoors, provide adequate ventilation using local exhaust ventilation or equivalent. Install a safety shower, hand-wash and eye-wash station near the point of use, and clearly indicate their locations.
Respiratory protection	Gas mask for acid gases (JIS T 8152).
Hand protection	Chemical-resistant protective gloves (JIS T 8116).
Eye / face protection	Safety glasses with side shields (goggles or full-face shield where necessary) (JIS T 8147).
Skin and body protection	Long-sleeved work clothing.

8. Handling and Storage

In principle this product does not fall under the "handling" hazards listed below, but in rare cases adverse effects may occur (individual variation applies).

Precautions

- Wear gloves when using the product if any cuts or abrasions are present on the hands. Some users may experience a tingling sensation in the pores.
- Prolonged handling, or use by persons with sensitive skin, may cause dryness, roughness or chapping.
- Persons with sensitive skin are recommended to wear gloves, protective clothing or similar equipment so that the product does not remain in prolonged direct contact with the skin.

Handling

Technical measures	Use outdoors or in a well-ventilated area whenever possible.
Safe handling advice	Avoid physical damage to the container such as tipping over or dropping. After use, ensure that the container is tightly sealed before storage. Wash hands and face thoroughly after handling. Do not eat, drink or smoke in the area where the product is handled. Unauthorized persons shall not enter the handling area.
Incompatibility (contact to avoid)	Avoid contact with alkaline substances and other chemicals. Do not allow contact with bases.

Storage

Safe storage conditions	Store in a closed container in a cool, well-ventilated place, out of direct sunlight.
Safe packaging materials	Polyethylene (PE).

9. Physical and Chemical Properties

Physical state	Liquid
Colour	Amber
Odour	Pungent (irritating)
pH	< 0.8
Boiling point	108 °C
Auto-ignition temperature	None
Density / relative density	1.06 g/mL
Kinematic viscosity	None available
Relative gas density	None available
Vapour pressure	20 mmHg (approx.)

Vapour density (air = 1)	1.27
Evaporation rate (butyl acetate = 1)	2.0
Solubility in water	Completely miscible with water
Flammability	None
Decomposition temperature	None available
n-Octanol / water partition coefficient (log K_{ow})	None available
Other solubility	None available
Particle characteristics	None available (liquid product)

10. Stability and Reactivity

Reactivity	No data available.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	High temperatures and direct sunlight; contact with incompatible materials (bases).
Hazardous decomposition products	Hydrogen chloride gas.

11. Toxicological Information

Acute toxicity — oral	Not classifiable due to lack of data
Acute toxicity — dermal	Not classifiable due to lack of data
Acute toxicity — inhalation (gas)	Not applicable (not a gas)
Acute toxicity — inhalation (vapour)	Not classifiable due to lack of data
Acute toxicity — inhalation (dust / mist)	Category 4 — Harmful if inhaled
Skin corrosion / irritation	Category 1 — Causes severe skin burns
Serious eye damage / eye irritation	Category 1 — Causes serious eye damage
Respiratory sensitization	Category 1 — May cause allergy, asthma symptoms or breathing difficulties if inhaled
Skin sensitization	Not classified
Specific target organ toxicity — single exposure	Category 2 (respiratory system) — May cause damage to the respiratory system
Specific target organ toxicity — repeated exposure	Category 2 (respiratory system, teeth) — May cause damage to the respiratory system and teeth through prolonged or repeated exposure
Germ cell mutagenicity	Not classifiable due to lack of data
Carcinogenicity	Not classifiable due to lack of data
Reproductive toxicity	Not classifiable due to lack of data
Aspiration hazard	Not classifiable due to lack of data

This product does not contain any substance listed as a carcinogen by the U.S. National Toxicology Program (NTP) or by the International Agency for Research on Cancer (IARC).

12. Ecological Information

Hazardous to the aquatic environment — short-term (acute) Category 2 — Toxic to aquatic life (crustacea EC₅₀ ≈ 0.492 mg/L).

Hazardous to the aquatic environment — long-term (chronic) Not classifiable due to lack of data.

Hazardous to the ozone layer Not classifiable due to lack of data.

13. Disposal Considerations

Disposal Method

- Dispose of the product in accordance with all applicable national, regional and local laws and regulations.
- Residues may be discharged to a normal sanitary sewer / wastewater treatment system.
- Waste disposal regulations differ significantly between municipalities. Confirm the requirements with the relevant local authority and comply with wastewater discharge standards before disposal.

14. Transport Information

UN number	UN1789
Proper shipping name	Hydrochloric acid
UN transport hazard class	8 (Corrosive substances)
Packing group	II
Marine pollutant	Not applicable

15. Regulatory Information

Applicable Japanese Laws and Regulations

- **Industrial Safety and Health Act (Japan)** — Hydrogen chloride: substance subject to labelling and SDS-provision obligations (Appended Table 9, item 98). Hydrogen chloride: Class 3 specified chemical substance subject to labelling and SDS-provision obligations (Appended Table 9, item 98). Hydrogen chloride: substance for which the use of impermeable protective equipment is mandatory.
- **Water Pollution Control Act** — Designated substance (Cabinet Order Article 3-3, item 5).
- **Poisonous and Deleterious Substances Control Act** — Not applicable.
- **Fire Service Act** — Not applicable.
- **PRTR Act (Pollutant Release and Transfer Register Act)** — Not applicable.
- **Air Pollution Control Act** — Soot and smoke — hazardous substance (Cabinet Order Article 1, item 2). Specified substance (Cabinet Order Article 10, item 9).
- **Export Trade Control Order** — Not applicable.
- **Chemical Substances Control Law (Kashinho)** — Not applicable.

16. Other Information

References

NITE (National Institute of Technology and Evaluation, Japan).

Remarks / Disclaimer

- This SDS has been prepared in accordance with JIS Z 7253:2019.
- The information contained herein is intended for normal handling of the product. If the product is combined or mixed with other substances, take appropriate safety measures before use.
- This document has been prepared based on the most recent information available as of the revision date. However, changes in laws and regulations, and new findings, may affect the hazard classification.
- When using the product, take every reasonable measure to ensure safety and to avoid exposure.

U.S. Federal Regulations

- **OSHA Hazard Communication Standard:** This product is classified as a non-hazardous product in accordance with OSHA 29 CFR 1910.1200.
- **OSHA Process Safety Management (PSM) Standard:** This product is not regulated under the OSHA PSM Standard, 29 CFR 1910.119.
- **EPA Risk Management Planning (RMP) Standard:** This product is not regulated under the EPA RMP Standard, 40 CFR Part 68.
- **EPA Federal Insecticide, Fungicide and Rodenticide Act (FIFRA):** This product is not registered as a pesticide under FIFRA, 40 CFR Part 150.
- **TSCA Status:** The components of this product are listed on the Toxic Substances Control Act (TSCA) inventory.
- **Superfund Amendments and Reauthorization Act (SARA)**
 - *SARA 313 Information:* The substances in this product do not exceed the de-minimis threshold values specified under Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986.
 - *SARA Section 311/312 Hazard Categories:* Serious health hazard.
 - *SARA 302/304 Extremely Hazardous Substances:* The components of this product comply with the requirements of SARA Title III.
 - *SARA 302/304 Emergency Planning & Notification:* None of the substances in this product fall under the requirements of SARA Title III.
- **Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):** The components of this product do not exceed the de-minimis threshold values for hazardous wastes defined under CERCLA.
- **Clean Air Act (CAA):** This product does not contain any substance designated as a Hazardous Air Pollutant (HAP) under CAA Section 112(b). This product does not contain Class 1 ozone-depleting substances, nor Class 2 ozone-depleting substances.
- **Clean Water Act (CWA):** The substances in this product do not contain any hazardous substances defined under CWA. The substances in this product do not contain any priority pollutants defined under CWA. The substances in this product do not contain any toxic pollutants defined under CWA.

U.S. State Regulations

California Proposition 65, Safe Drinking Water and Toxic Enforcement Act of 1986: This product does not contain any substance known to the State of California to cause cancer or reproductive harm.

Canadian Regulations

- **Canadian Controlled Products Regulations (CPR):** This product is classified according to the hazard criteria of the CPR, and this SDS contains the information required by the CPR.
- **Canadian Ingredient Disclosure List (IDL):** Hydrogen chloride (7647-01-0).
- **Canadian National Pollutant Release Inventory (NPRI):** This product does not contain any chemical substance registered on the NPRI.

Global Chemical Inventory Lists

Country / Region	Inventory Name	Listed *
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
Europe	Inventory of New and Existing Chemicals (EINECS)	Yes
United States	Toxic Substances Control Act (TSCA)	Yes
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (ENCS)	No
Korea	Existing Chemicals List of Korea (ECL)	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

* **"Yes"** — indicates that the components of this product comply with the requirements of the respective country's inventory list.

* **"No"** — indicates that one or more of the components of this product are not listed on, and are therefore outside, the respective country's inventory list.

End of Safety Data Sheet.

Prepared / Revised: 2026-09-01 · Sole Distributor in Japan: PROUP Co., Ltd. · info@proup-impact.co.jp · +81-(0)25-290-7704