D-Scale™ Acid Scale Remover

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: D-Scale Acid Scale Remover
Catalog Number: D-Scale
Manufactured by: DiversiTech Corporation
6650 Sugarloaf Parkway
Duluth, GA 30097

Information Phone No: 1+678-542-3600
EMERGENCY Phone No.: 1+800.434.9300 Chem-Tel (Chemical Emergencies Only)
Prepared by: V. Leone

SECTION 2. HAZARDOUS IDENTIFICATION

GHS Classification:
Acute Toxicity Oral Category 4
Acute Toxicity Inhalation Category 4
Skin Irritation Category 1B
Eye Irritation Category 1
Specific Target Organ Toxicity- Single Exposure Respiratory Tract Irritation Category 3

Label Elements:

Signal Word: Danger!

Hazard Statement(s):
H302 Harmful if swallowed.
H332 Harmful if inhaled.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

Precautionary Statement(s):
P102 Keep out of reach of children.
P103 Read label before use.
P260 Do not breathe fume, mist or spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear rubber, nitrile or neoprene protective gloves and clothing, and safety goggles or face shield to protect eyes and face.
P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse SKIN with water or shower.
P363 Wash contaminated clothing before reuse.
P340+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor.
P403+233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents and container to appropriate facility in accordance with Federal, State, and local regulations.
D-Scale™ Acid Scale Remover

SECTION 3. HAZARDOUS INGREDIENTS INFORMATION

<table>
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<tr>
<th>INGREDIENT</th>
<th>CAS No.</th>
<th>EINECS No.</th>
<th>% or Range</th>
<th>GHS Classification</th>
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<tr>
<td>Hydrochloric Acid</td>
<td>7647-01-0</td>
<td>231-595-7</td>
<td>10-20</td>
<td>H314: Acute Toxicity</td>
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<td></td>
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<td></td>
<td>Category 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H314: Skin severe</td>
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<tr>
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<td></td>
<td></td>
<td>Skin burns and eye dam.</td>
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<td></td>
<td>H371: May cause dam.</td>
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<td></td>
<td></td>
<td></td>
<td>To organs</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Category 2</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation: Remove to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion: Rinse mouth. DO NOT INDUCE VOMITING! Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

4.2. Signs and Symptoms of Exposure:

Inhalation: Effects from inhalation of mist and spray may cause serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may vary from mild to severe irritation, sneezing, sore throat or runny nose. Severe pneumonitis may occur.

Ingestion: Symptoms may include burns of mouth, throat, and stomach bleeding, vomiting, diarrhea, fall in blood pressure.

Skin Contact: Contact with skin can cause redness, irritation or severe burns and scarring with greater exposures.

Eye Contact: Contact with mist, spray or liquid causes redness, severe irritation or burning in eyes. Prolonged exposures can cause burns that may result in permanent impairment of vision, even blindness.

Chronic Exposure: Prolonged contact with dilute solutions or mists has a destructive effect upon tissue.

SECTION 5. FIREFIGHTING MEASURES

Suitable and Unsuitable Extinguishing Media: Liquid and mists are irritating and corrosive. Wear full protective gear including self-contained breathing apparatus. Keep containers cooled with a water spray if involved in a fire. This product can react with metals and release hazardous quantities of hydrogen gas.

Special Equipment and Precautions for Fire-Fighters: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face-piece operated in the pressure demand or other positive pressure mode.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment and clothing during clean-up.

Methods and Material for Containment and Clean-Up: Neutralize with sodium bicarbonate, soda ash, or lime. Pick up neutralized solution with a plastic pump or vacuum truck and store the neutralized solution in a leak-proof polyethylene container until product can be disposed of in a hazardous waste facility. Flush area twice with water to remove any remaining residues. Store wash solution in polyethylene containers for disposal. Do not use aluminum tools to collect absorbed material or aluminum containers to store collected wastes. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.
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SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling: Keep in a tightly closed container. Protect from physical damage. Keep this and all chemicals out of the reach of children. Wash thoroughly after handling.

Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatible materials. Store locked up. Protect from freezing. Containers of this material may be hazardous when empty since they retain product residues. Do not store with aluminum or magnesium. Do not mix with acids or organic materials.

Observe all warnings and precautions listed for the product.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure Limits:

Hydrochloric Acid:
OSHA Permissible Exposure Limit (PEL): 5ppm

Appropriate Engineering Controls:
A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):
If the exposure limit is exceeded and engineering controls are not feasible, a half face piece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear rubber, neoprene, nitrile, Saranex® boots, gloves, lab coat, apron or coveralls, as necessary and appropriate, to prevent skin contact.

Eye Protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities or a source of running water in the work area.

Work Hygienic Practices: Use proper industrial hygiene practices to minimize hazardous exposure. Wash hands after handling this material, and before eating, smoking or using the bathroom.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Dark purple liquid
**Odor:** Pungent acid
**pH @ 25°C:** < 1
**Melting Point (Pour Point):** <0°C (32°F)
**Boiling Point:** >100°C (212°F)
**Flash Point:** Not established

**Evaporation Rate (Water = 1):** Not established
**Flammable Limits:** Not established
**LEL:** N/A
**UEL:** N/A
**Vapor pressure (mm Hg):** Not established
**Vapor Density (Air = 1):** Not established

**Relative density:** 1.100

**Specific gravity (H₂O = 1):** 1.140
**Solubility in water:** 100% water soluble
**Octanol/Water Partition Coefficient:** Not available
**Autoignition Temperature:** Not available
**Decomposition Temperature:** Not available
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SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Stable under ordinary conditions of use and storage.

Possibility of Hazardous Reactions: Will not occur.

Conditions to Avoid: Extreme heat, incompatibles.

Incompatible Materials: Substance polymerizes on contact with aldehydes or epoxides. Reactions with alkalis and active metals generate great deal of heat. Mixing with strong oxidizers can produce poisonous gas. Avoid open flames or sparks.

Hazardous Decomposition Products: Chlorine gas may be released when product is mixed with strong oxidizers. Hydrogen chloride, carbon dioxide, carbon monoxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Inhalation: Effects from inhalation of mist and spray may cause serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may vary from mild to severe irritation, sneezing, sore throat or runny nose. Severe pneumonitis may occur.

Ingestion: Symptoms may include burns of mouth, throat, and stomach bleeding, vomiting, diarrhea, fall in blood pressure.

Skin Contact: Contact with skin can cause redness, irritation or severe burns and scarring with greater exposures.

Eye Contact: Contact with mist, spray or liquid causes redness, severe irritation or burning in eyes. Prolonged exposures can cause burns that may result in permanent impairment of vision, even blindness.

Chronic Exposure: Prolonged contact with dilute solutions or mists has a destructive effect upon tissue.

Carcinogenic effects: Not classified

Teratogenicity/Reproductive toxicity: Not classified

Mutagenic effects: Not classified

Numerical Measures of Toxicity:

Hydrochloric Acid: Oral- Rabbit LD50: 900 mg/kg
Inhalation-Rat LC50: 3124 ppm/1hr

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:

Hydrochloric Acid:
LC50: 282 .g/L, Gambusia affinis
LC50: 3.6 mg/L, Lepomis macrochirus

Aquatic: This product is toxic to Aquatic Life. Toxicity is primarily associated with pH.

Persistence and Degradability: Not expected to biodegrade or bio-concentrate

Bioaccumulative Potential: No data available

Mobility in Soil: When released into the soil, this material may leach into groundwater. This substance will neutralize soil carbonate-based compounds in the environment.

Other Adverse Effects: None known

Other: For more information, see “HANDBOOK OF ENVIRONMENTAL FATE AND EXPOSURE DATA.”
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SECTION 13. DISPOSAL CONSIDERATIONS
Whatever product cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Empty containers may contain residues. Thoroughly clean empty container, then offer for recycling, reuse or disposal in accordance with federal, state and local requirements.

RCRA Hazard Class (if discarded): CORROSIVE D002. State and local disposal regulations may differ from federal disposal regulations.

SECTION 14. TRANSPORTATION INFORMATION
UN Number: UN3264
US DOT: UN3264, Corrosive liquid, Acidic, Inorganic, N.O.S. (Contains hydrochloric acid and phosphoric acid) 8, PGII
Transport Hazard Class(s): 8
Packing group: II
Environmental Hazards: Not Environmentally Hazardous Substance; not a Marine Pollutant
ADR/RID ROAD/CDG
Transport Information: Transport category 3; Tunnel restriction code
E SEA (IMDG) AIR (ICAO/IATA): ERG Code 8L
ADR/RID Class: 8
ADR/RID Packing Group: II
IMDG Hazard Class: 8
IMDG Packing Group: II
IMDG Code Segregation Group: 1 – Acids
EmS: F-A S-B
ADNR Item
IATA Hazard Class: 8
IATA Packing Group: II
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

SECTION 15. REGULATORY INFORMATION
US EPA
Comprehensive Environmental Response Compensation and Liability
Act of 1980 (CERCLA) requires notification of the National Response Center of release quantities of Hazardous Substances is not required for this material.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on threshold planning quantities and release reporting based on reportable quantities in 40 CFR 355 (used for SARA 302, 304, 311, and 312) is not required for quantities below 250 pounds.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This material is not subject to reporting requirements.

Toxic Substances Control Act (TSCA) Status: The ingredients of this product are not on the TSCA inventory.

State Right to Know
California Proposition 65: This product does not contain any materials on the Proposition 65 List of Chemicals Known to Cause Cancer or Reproductive Toxicity.
Massachusetts: Hazardous substances and extraordinarily hazardous substances must be identified.
Pennsylvania: Hazardous substances must be identified.
California SCAQMD Rule 443.1 (VOC's): None
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SECTION 15. REGULATORY INFORMATION (cont.)

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<tr>
<th>Ingredient</th>
<th>EC</th>
<th>Japan</th>
<th>Australia</th>
<th>Korea</th>
<th>DSL</th>
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<tr>
<td>Hydrogen Chloride (7647-01-0)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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TSCA: (40CFR 710) All chemical ingredients are listed on the TSCA 8(b) inventory. None are on the Health and Safety Reporting List, under Chemical Test rule, listed under TSCA Section 12B, or have a SNUR under TSCA.

CERCLA Reportable Quantity: (40CFR 302.4) 5,000 lbs. of hydrochloric acid (3500 gallons of product).

SARA TITLE III:
Section 302/304 Extremely Hazardous Substances: Final RQ = 31,000 lbs.; TPQ = 3100 lbs; RQ = 31,000 lbs (does not meet toxicity criteria)
Section 311 Hazard Categorization: Acute - Health, Delayed - Health, Chronic - Health
Section 313 Toxic Chemicals: Hydrochloric acid is subject to the reporting requirements of Section 313 of SARA title III and 40 CFR part 373

Clean Air Act: Hydrochloric acid is listed as a hazardous air pollutant (HAP), but does not contain ozone depletors, nor was it made from such chemicals.

Clean Water Act: Hydrochloric acid is listed as a hazardous substance under CWA


STATE RIGHT-TO-KNOW LISTS: Hydrochloric acid, CAS# 7647-01-1 is on the following state RTK lists: California, Connecticut, Florida, Illinois, Louisiana, Massachusetts, Maine, Minnesota, New Jersey, Pennsylvania, & Rhode Island. Other ingredients are NOT listed on the following RTK lists: California, Florida, Illinois, Louisiana, Maine, Maryland, Massachusetts, Minnesota, New Jersey, New York, Pennsylvania, Rhode Island or Tennessee.

Not subject to California Proposition 65 labeling requirements (California)

Canadian DSL: Hydrochloric acid (CAS# 7647-01-0) is listed on Canada’s DSL list.

Canada’s Ingredient Disclosure List: Hydrochloric acid (CAS# 7647-01-1) is listed on the CIDL Canadian WHMIS: Class E - “corrosive” & Class D2 “Other Toxic Effects”

TDG Classification: Corrosive Liquid, Acidic, Inorganic, N.O.S. (Contains Hydrochloric acid) Class 8, UN 3266, PG II

This SDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR.

SECTION 16. OTHER INFORMATION

Revision Summary: All Sections: New GHS Format

Date Revised: 10/13/2015

HMIS III Ratings:

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