

D'Scale™ Acid Scale Remover

MSDS# SCM-709

May 2012

6 Total Pages

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: D'Scale™ Acid Scale Remover

Manufactured by: Diversitech

6650 Sugarloaf Parkway, Duluth, GA 30097

Phone: 800-995-2222 (Product Information)

Phone: 800-255-3924 (CHEM-TEL, Chemical Emergencies Only)

Revised: 05/25/2012

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2. HAZARDS IDENTIFICATION



Corrosive

Emergency Overview:

CAUTION! Corrosive. Irritation upon contact with eyes, possible burns upon prolonged contact. Skin irritation possible on contact. Digestive tract burns possible on ingestion

Potential Health Effects:

Signs and Symptoms of Acute Overexposure: Contact with liquid, mist, or vapor can cause immediate irritation or corrosive burns to all human tissue. Severity of the burn is generally determined by the concentration of the solution and duration of exposure. Contact with eyes may result in permanent visual loss unless removed quickly by thorough irrigation with water. Inhalation of concentrated vapor or mist will damage upper respiratory tract and lung tissues. Swallowing may be fatal. May be absorbed through the skin in harmful amounts.

Signs and Symptoms of Chronic Overexposure: Repeated exposure may cause chronic bronchitis or respiratory inflammation and erosion of teeth. Repeated skin contact with dilute solutions may cause dermatitis. Repeated eye contact may cause conjunctivitis and photosensitization.

Medical Conditions Generally Aggravated by Exposure: Skin, eye and respiratory disorders

Other Comments: Hydrochloric acid is listed as a Group 3 carcinogen by IARC.

3. HAZARDOUS INGREDIENTS INFORMATION

INGREDIENT	CAS NO	% or Range	Hazard Class	Risk Phrases
Hydrochloric acid	7647-0-10	10-20	Corrosive	R-22, R-34, R36, 37, 38

Ingredients not precisely identified are proprietary and/or non-hazardous per 29 CFR 1910-1200 and/or represent less than 1%. All chemical ingredients appear on the EPA TSCA inventory.

D'Scale™ Acid Scale Remover

4. FIRST AID MEASURES

Inhalation: Remove patient to fresh air. Get prompt medical attention.

Ingestion: Do not induce vomiting. Give patient large amounts of milk or water to drink. Get patient to hospital promptly.

Skin Contact: Remove contaminated clothing and footwear. Wash skin for 15 minutes with soap and water. Wash clothing before reuse. If irritation persists, get medical attention.

Eye Contact: Immediately flush eyes with water for 15 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye and eyelid tissue. Do not allow patient to rub or keep eyes closed. Get immediate medical attention.

Note to Physician: Treat symptomatically. No specific antidote.

5. FIRE AND EXPLOSION HAZARD DATA

Extinguishing media: Not applicable

Special Fire Fighting Procedures: 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.

Unusual Fire and Explosion Hazards: This product can react with metals and release hazardous quantities of hydrogen gas.

6. ACCIDENTAL RELEASE MEASURES

Wear goggles or face shield to protect eyes and face; impervious, acid resistant gloves, apron and boots (see Section 8) and respiratory protection when working with spills. Remove contaminated garments promptly. Remove unnecessary personnel from the area. Floors may be slippery; use care to avoid falling. Dike the spill immediately with inert materials to prevent the spread of liquid. Absorb the liquid with an inert absorbent such as sand, dirt, vermiculite or "oil-dri", or use commercial absorbent pads, or neutralize the spill with lime or soda ash. Transfer liquids and solid materials to suitable containers, and dispose of in accordance with local, state, and federal regulations. DO NOT contaminate municipal sewers or other open bodies of water with runoff. Report spills of 3100 gallons or more to the National Response Center (800) 424-8802.

7. HANDLING AND STORAGE

Protect container from physical damage. Do not strike containers or fittings with tools or hard objects. Keep container closed and dry, when not in use. Store away from heat and oxidizing agents (yellow label). Wash hands thoroughly after handling, and before eating smoking or using the toilet. Emptied container may retain vapor and product residue. Store in a "Corrosives" area. Empty containers may retain residue. All containers should be disposed of in an environmentally safe manner, and in accordance with all governmental regulations. Keep this and all chemicals out of the reach of children.

8. CONTROL MEASURES

Exposure Limits: ACGIH TLV (Hydrochloric acid) 5ppm, OSHA PEL (Hydrochloric acid) 5ppm

Engineering Controls:

Ventilation: Use local exhaust in enclosed areas.

Other Control Measures: A source of clean water should be available in the work area for flushing eyes and skin.

Personal Protective Equipment:

Eye protection: Safety glasses (ANSI Z87.1) or approved equivalent as necessary to minimize eye contact hazards. Avoid wearing contact lenses when using or handling this material.

Protective Gloves: Use Neoprene or other materials if there is documented evidence of compatibility.

Respiratory Protection (Specify Type): Use in a well-ventilated area. If mist is being generated and the concentration exceeds the TLV for this product, follow a respiratory program meeting OSHA 1910.134 and ANSI Z88.2 requirements.

Other Protective Clothing: Neoprene or Tyvek® aprons, boots, overshoes, oversleeves or other impervious clothing as necessary to minimize exposure.

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 toilet..

D'Scale™ Acid Scale Remover

9. PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance: Dark purple liquid
Odor: pungent, acrid
Odor threshold: N/A
pH: <1
Melting point/freezing point: <0 °C (32°F)
Initial boiling point and boiling range: >100°C (212°F)
Flash point: Not applicable
Evaporation rate (Water=1): ~1
Flammability limits %: Not applicable
Vapor pressure: @20°C
Vapor density: N/A
Relative density: 1.10
Solubility: 100% soluble in water
Partition Coefficient: n-octanol/water: N/A
Auto-ignition temperature: Not applicable
Decomposition temperature: N/A
Viscosity: N/A
Explosive properties: Not applicable
Oxidizing properties: Not applicable
N/A = Data not available

10. STABILITY AND REACTIVITY

Stability: Product is stable under normal conditions of storage and handling.
Hazardous Decomposition Products: Chlorine gas may be released when product is mixed with strong oxidizers. Hydrogen chloride, carbon dioxide, carbon monoxide.
Hazardous Polymerization: has not been reported
Incompatibility: 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.
Conditions to Avoid: Incompatible chemicals

11. TOXICOLOGICAL INFORMATION

Toxicological Data: (CFR Title 16)
RTECS: CAS# 7647-01-0: MW4025000
LD50 /LC50 (Hydrochloric acid, CAS#7647-01-0): Oral, rabbit: LD50 =900 mg/kg; Inhalation, mouse: LC50 1108 ppm/1H/
Carcinogenicity:
IARC: Hydrochloric acid (CAS 7647-01-0) is listed as a Group 3 animal carcinogen, but it is not listed on ACGIH, NIOSH, NTR or OSHA.
Teratogenicity: Hydrochloric acid (CAS 7647-01-0): Embryo or Fetus; Stunted Fetus. IHL-Rat TCLo= 450 mg/m³/1H. Specific Development Abnormalities; homeostasis, int-net TCLo=400 mg/m³/1H.,
Mutagenicity: Hydrochloric acid (CAS 7647-01-0): sin-dmg-ihl:100 ppm/24H sin-dmg-orl:100 ppm cyt-grh-par :20 mg cyt-ham lung:30 mmol/l cyt-ovr-ham:8 mmol/l.

D'Scale™ Acid Scale Remover

12. ECOLOGICAL INFORMATION

Environmental Fate: When released into the soil, this material is not expected to biodegrade. When released into the soil, this material may leach into groundwater. This substance will neutralize soil carbonate-based compounds in the environment.

Environmental Toxicity: Hydrochloric Acid CAS 7647-01-0: Trout LC100=10 mg/L/24H

Fish-toxicity LC50:862 mg/l

Shrimp LC50=100-330ppm; Starfish LC50=100-330mg/L/48H

Shore crab LC50=240 mg/L/48H.

Chronic plant toxicity=100 ppm

Can cause a serious pH drop if not thoroughly diluted or neutralized prior to dispensing into sewer system or other body of water

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.

14. Transport Information

UN Number: 3264

UN Proper Shipping Name: Corrosive liquid, Acidic, Inorganic, N.O.S. (Contains hydrochloric acid),

Transport Hazard Class(es): 8

Packing group: II

Environmental Hazards: Not a marine pollutant

ADR/RID Transport Information.

ADR/RID Class 8

ADR/RID Packing Group II

IMDG Hazard Class 8

IMDG Packing Group II

ADNR Class 8

ADNR Item II

IATA Hazard Class 8

IATA Packing Group II

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

EmS: F-A, S-B

15. Regulatory Information



Corrosive

Risk Phrases:

R22: Harmful if swallowed

D'Scale™ Acid Scale Remover

R34: Causes burns

R36/ 37/ 38: Irritating to eyes, respiratory system and skin

Chemical Inventory Status -

Canada

Ingredient	TSCA	EC	Japan	Australia	Korea	DSL	NDSL	Phil.
Hydrogen Chloride (7647-01-0)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes

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 (dos 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

OSHA: Hydrochloric acid is listed as "Extremely Hazardous" by definition of Hazard Communication Standard (29CFR 1910.1200).

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.

16. Other Information

NFPA Ratings: Health: 2 Flammability: 0 Reactivity: 0

0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe

Label Hazard Warning:

CAUTION CORROSIVE: Contains hydrochloric acid.

Label Precautions:

DO NOT TAKE INTERNALLY. Avoid contact with eyes and skin. Avoid breathing fumes.

D'Scale™ Acid Scale Remover

Use protective equipment when handling.

Label First Aid:

For eye or skin contact, flush with cool water for 15 minutes and get medical attention. If swallowed call the nearest poison control center or the National Poison Control Hotline at **1-800-222-1222** for advice. For inhalation, remove the affected individual to fresh air. If breathing does not return to normal within 15 minutes, get medical attention. Consult the **MSDS** for additional storage and handling information.

This information is, to the best of our knowledge and belief, accurate and reliable as of the date completed. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the completeness and suitability of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information, nor do we offer any warranty against patent infringement.