

MATERIAL SAFETY DATA SHEET

(COMPLIES WITH 29CFR 1910.1200)

SECTION I - CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Identity (As Used on Label and List): Heavy Duty Acid Cleaner

Product Class: Water-Based Acid Cleaner.

Emergency Telephone Number: 800-255-3924

Telephone Number for Information: 800-950-1975

Distributed By:

Dalco, 300 5th Ave N.W., New Brighton, Minnesota 55112

SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components (Specific Chemical Identity):

Chemical	Common Name(s)	%
A	Nitric Acid CAS #7697-37-2	10 - 20
B	Phosphoric Acid CAS #7664-38-2	5 - 10
C	Cocamidopropyl Hydroxy Sultaine CAS #70851-08-0	1 - 5
D	Water CAS #7732-18-5	60 - 100

SECTION III - HAZARDS IDENTIFICATION

Emergency Overview

Appearance and Odor: Clear Liquid. Strong acid scent.

Primary Hazards: Corrosive

Potential Health Hazards

Route(s) of Entry: Eye Contact: X Skin Contact: X Ingestion: X Inhalation: X

Eye: Exposure to material or concentrated mist will cause severe damage and even blindness very rapidly.

Skin: Exposure to material or concentrated mist will cause immediate burns with yellow skin discoloration. Deep ulceration of skin is possible.

Ingestion: Ingestion will result in severe damage to mucous membranes (digestive tract) and deep tissues, and may be fatal.

Inhalation: Exposure may cause pulmonary irritation and symptoms of lung damage. High concentrations of mist or fumes will cause severe pulmonary damage with possible fatal results after several minutes exposure.

Signs and Symptoms of Exposure: Severe Burns on direct contact.

Carcinogenicity: NTP? No **IARC Monographs?** No **OSHA Regulated?**

No Target Organ (s): No additional data

Medical Conditions Generally Aggravated by Exposure: Existing skin disorders and lung disorders (such as asthma) may be aggravated by long term exposure.

Health Hazards, Chronic: Chronic ingestion (of nitrates) may cause damage to the central nervous system, heart, kidneys, and blood forming tissues and may lead to diarrhea, convulsions, headache, mental impairment, dizziness and tachycardia.

SECTION IV - FIRST AID MEASURES

Emergency and First Aid Procedures: **If Swallowed:** Do not induce vomiting. If a person can swallow, give several glasses of water. Obtain immediate medical attention.

Eye Contact: Flush eyes with running water for at least 30 minutes. Obtain immediate medical attention. **Skin Contact:** Flush with cool water for 20 minutes. Remove and wash contaminated clothing before reuse. Obtain medical attention. **For Inhalation:**

Remove to fresh air. Obtain medical attention. **Sources Used:** Raw material data, general toxicology from the trade for similar products.

SECTION V - FIRE FIGHTING MEASURES

Flammability: No **Autoignition Temperature:** N. Ap.

Flash Point (method used): None

Flammable Limits: N. Ap.

LEL UEL

Extinguishing Media: N. Ap.

Water?	Foam?	Water Fog?
Alcohol Foam?	CO ₂ ?	Dry Chemical?
Vaporizing Liquid?	Other?	

Special Fire Fighting Procedures: N. Ap.

Unusual Fire and Explosion Hazards: N. Av.

TDG Flammability Classification: Non-flammable

Sensitivity to Mechanical Impact: None

Sensitivity to Static Discharge: None

SECTION VI - ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Released or Spilled:

Dike and contain spill with inert material (sand, earth, etc). Collect spill with mop, absorbent material (example: floor-dri) or vacuum. Thoroughly rinse affected area with water.

SECTION VII - HANDLING AND STORAGE

Precautions to be Taken in Handling and Storing: Wear splash proof chemical safety goggles. Additional full face protection is recommended. Wear chemical and heat resistant gloves and chemical resistant boots (such as neoprene or rubber) and appropriate chemical and heat resistant clothing to prevent skin contact. Protect storage containers from impact, excessive temperatures, open flames, direct sunlight. Store in well ventilated area. Store separately from organic chemicals, strong bases, metal powders, carbides, sulfides, and readily oxidizable materials.

Other Precautions: Keep out of reach of children. Keep from freezing.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection (Specify Types): If concentrations exceed recommended exposure levels, use a NIOSH-approved respirator suitable for the use with nitric acid and the exposure conditions.

Ventilation: Local Exhaust: If needed, provide general exhaust ventilation systems or other engineering controls to maintain airborne concentrations below regulatory levels (see section XI).

Protective Gloves: Wear chemical and heat resistant gloves (neoprene or rubber).

Eye Protection: Wear protective splash proof safety goggles per OSHA eye and face protection regulations (29 CFR 1910.133). Additional full face protection is recommended. **Footwear:** Chemical resistant, rubber or neoprene.

Other Protective Clothing or Equipment: Make emergency eyewash stations and emergency showers available in the immediate work area.

Work/Hygienic Practices: Practice good personal hygiene during and after use of this material, especially before eating, drinking, smoking or using the toilet.

SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: Approximately 212°F

Specific Gravity (H₂O) = 1: 1.13

Vapor Density (Air = 1): < 1

Evaporation Rate (Butyl Acetate = 1): N. Av.

Solubility in Water: Complete

Vapor Pressure (MM HG): N. Av.

pH: 1-2 (1% solution)

Volatile: 50 - 75

Odor Threshold: N. Av.

Oil/Water Distribution

Coefficient: N. Av.

Melting Point: N. Ap.

SECTION X - STABILITY AND REACTIVITY

Stability: Unstable: Stable: X

Conditions to Avoid: Exposure to elevated temperatures, open flames, and incompatible chemicals.

Incompatibility (materials to avoid): Reacts explosively with metallic powders, carbides, hydrogen sulfide, and turpentine. Increase the flammability of combustible, organic and readily oxidizable materials and can cause ignition of some of these materials. Do not mix with organic chemicals, strong bases, metal powders, carbides, sulfides, and readily oxidizable materials. Do not use on marble, terrazzo other acid sensitive surfaces.

Hazardous Decomposition or By-products: Nitrogen Oxides.

Hazardous Polymerization: May occur:

Will not occur: X

SECTION XI - TOXICOLOGICAL INFORMATION

Chemical	OSHA PEL	ACGIH TLV	Recom.	LD50	LC50
A	5 mg/m ³ (2 ppm)	5.2 mg/m ³ (2 ppm)	N. Ap.	430 mg/kg LD ₅₀ (human)	50 ug/m ³ (LC ₅₀ , rat, 4
B	1 mg/m ³	1 mg/m ³	N. Ap.	4,400 mg/kg (rat, oral)	7.7 mg/L (rat, 4 hr.)
C	N. Av.	N. Av.	N. Av.	8250 mg/kg (rat)	N. Av.
D	None	None	N. Av.	N. Av.	N. Av.

Teratogen, Mutagen, Reproductive Toxin Status: No

Toxicologically Synergistic Products: N. Av.

SECTION XII - ECOLOGICAL INFORMATION

Ecotoxicological Information: Nitric Acid can cause vegetation kill, toxicity to aquatic life, and contribute to eutrophication.

Chemical Fate Information: N. Av.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Neutralize and dispose of spilled material in accordance with local, state and federal regulations. Waste from normal cleaning procedures may be sewerred, depending on the materials and/or contaminants being cleaned as well as state, federal and local sewer commission regulations.

RCRA Hazard Class: D002, Characteristic Corrosive

SECTION XIV - TRANSPORT INFORMATION

Shipping Classification: Corrosive Liquid, Acidic Inorganic, N.O.S. (Containing Nitric Acid), Class 8

UN Number: UN3264

Packing Group: II

SECTION XV - PREPARATION DATA

Prepared By: Mike Elms

Telephone Number: 651-481-1900

Date: 8/02

SECTION XVI - REGULATORY INFORMATION

US Federal Regulations

TSCA Status: All ingredients listed.

CERCLA Reportable Quality: 5,000 Pounds, Phosphoric Acid

1,000 pounds, Nitric Acid

SARA Title III

Section 302 Extremely Hazardous Chemicals: Yes (Nitric Acid)

Section 311/312 Hazard Category: Acute, Reactive (Nitric Acid)

Section 313 Toxic Chemicals: Phosphoric Acid, Nitrate compounds-water dissociable; reportable only when in aqueous solution.

State Regulations

NOTICE STATE OF CALIFORNIA

Warning: This product may contain chemicals known to the State of California to cause cancer or reproductive defects as trace impurities in the standard industrial materials used in the manufacture of this product.

International Regulations

WHMIS Controlled Product Hazard Class: NA

SECTION XVII - OTHER INFORMATION

None

N. Ap. - Not Applicable; N. Av. - Not Available

NFPA SYSTEM

3 A. Health Hazard **0** A. Fire Hazard **0** A. Reactivity Hazard

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