

# MATERIAL SAFETY DATA SHEET

(COMPLIES WITH 29CFR 1910.1200)

## SECTION I - CHEMICAL PRODUCT & COMPANY IDENTIFICATION

**Identity (As Used on Label and List):** Multi-Clean Concrete Cleaner & Etcher Concentrate  
**Product Class:** Water-based acid etcher  
**Emergency Telephone Number:** 800-255-3924  
**Telephone Number for Information:** 651-481-1900  
**Manufacturer's Name and Address:**  
Multi-Clean®, A Division of Minuteman International, Inc.  
600 Cardigan Road  
Shoreview, MN 55126

## SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

### Hazardous Components (Specific Chemical Identity):

Chemical	Common Name(s)	%
A	Hydrogen chloride CAS #7647-01-0	15 - 40
B	2-Butoxy ethanol CAS #111-76-2	1 - 5
C	Nonylphenol ethoxylates CAS #9016-45-9	1 - 5
D	Water CAS #7732-18-5	60 - 100

## SECTION III - HAZARDS IDENTIFICATION

### Emergency Overview

**Appearance and Odor:** Clear liquid, acid odor.

**Primary Hazards:** Corrosive

### Potential Health Hazards

**Route(s) of Entry:** Skin Absorption: X Ingestion: X Inhalation: X

**Eye:** May cause severe burns.

**Skin:** May cause severe burns.

**Ingestion:** May be harmful or fatal if swallowed.

**Inhalation:** Vapors may be harmful.

**Signs and Symptoms of Exposure:** Severe irritation on direct contact.

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

**OSHA Regulated?** No

**Target Organ (s):** Eyes, skin, respiratory system.

**Medical Conditions Generally Aggravated by Exposure:** N. Av.

**Health Hazards, Chronic:** N. Av.

## SECTION IV - FIRST AID MEASURES

### Emergency and First Aid Procedures:

**If Swallowed:** Do not induce vomiting. Drink water in large amounts, follow with milk of magnesia, beaten eggs or vegetable oil. Call a physician immediately. Never give anything by mouth to an unconscious person. **Eye Contact:** Flush eyes with running water for at least 15 minutes. If irritation persists, obtain medical attention. **Skin Contact:** Flush thoroughly with cool water. Remove and wash contaminated clothing before reuse.

**Corrosive:** May cause stricture. If lavage is performed, suggest endotracheal and/or esophagoscopy control. If burn is present, treat as thermal burn, after decontamination. No specific antidote.

**Sources Used:** Raw material data, general toxicology from the trade for similar products.

## SECTION V - FIRE FIGHTING MEASURES

**Flammability:** Non-flammable **Autoignition Temperature:** N. Av.

**Flash Point (method used):** None

**Flammable Limits:** N. Av.

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**Extinguishing Media:** N. Av.

Water?	Foam?	Water Fog?
Alcohol	CO <sub>2</sub>	Dry Chemical?
Vaporizing Liquid?	Other?	

**Special Fire Fighting Procedures:** N. Av.

**Unusual Fire and Explosion Hazards:** Hydrogen chloride is non-flammable, however flammable hydrogen gas can be generated when it is in contact with metals.

**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:

Normal care in handling and storage.

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

## SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection (Specify Types):** Not required where ventilation is sufficient to maintain hydrogen chloride vapor level below listed TLV (Section XI). Use NIOSH/MSHS approved acid vapor respirator in areas where vapor level exceeds TLV.

**Ventilation:** Local Exhaust: Not required **Special:** Not required

**Mechanical (General):** As required to keep vapor levels below listed TLV (Section XI).

**Other:** Not required

**Protective Gloves:** Chemical resistant rubber  
**Eye Protection:** Approved safety goggles or glasses.  
**Footwear:** Chemical resistant footwear may be required.  
**Other Protective Clothing or Equipment:** Not required  
**Work/Hygienic Practices:** Do not contaminate food or beverages with cleaning chemicals.

## SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

**Boiling Point:** Approximately 212°F (100°C) **pH:** < 1  
**Specific Gravity (H<sub>2</sub>O = 1):** 1.086 **% Volatile:** > 90  
**Vapor Density (Air = 1):** > 1 **Odor Threshold:** N. Av.  
**Evaporation Rate (Butyl Acetate = 1):** N. Av. **Oil/Water Distribution Coefficient:** N. Av.  
**Solubility in Water:** Complete  
**Vapor Pressure (MM HG):** N. Av.  
**Melting Point:** N. Ap.

## SECTION X - STABILITY AND REACTIVITY

**Stability:** Unstable: Stable: X  
**Conditions to Avoid:** Avoid contact with metals.  
**Incompatibility (materials to avoid):** Chlorine bleach, oxidizing agents.  
**Hazardous Decomposition or By-products:** N. Av.  
**Hazardous Polymerization:** May occur: Will not occur: X  
**Conditions to Avoid:** N. Ap.

## SECTION XI - TOXICOLOGICAL INFORMATION

Chemical	OSHA PEL	ACGIH TLV	Recom.	LD50	LC50
A	C5 ppm	C5 ppm	N. Av.	N. Av.	N. Av.
B	25 ppm(skin)	25 ppm(skin)	N. Av.	1.48 g/kg (rat, oral)	N. Av.
C	None	None	N. Av.	2,100 mg/kg (rat, oral)	> 200 mg/L (rat, oral)
D	None	None	N. Av.	N. Av.	N. Av.

**Teratogen, Mutagen, Reproductive Toxin Status:** N. Av.

**Toxicologically Synergistic Products:** N. Av.

## SECTION XII - ECOLOGICAL INFORMATION

**Ecotoxicological Information:** N. Av.

**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 sewered, 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 Hydrochloric Acid), class 8

**UN Number:** 3264

**Packing Group:** II

## SECTION XV - PREPARATION DATA

**Prepared By:** Mike Tarvin

**Telephone Number:** 651-481-1900

**Date:** 4/08

## SECTION XVI - REGULATORY INFORMATION

### US Federal Regulations

**TSCA Status:** All ingredients listed.

**CERCLA Reportable Quality:** > 5,000 lbs.

### SARA Title III

**Section 302 Extremely Hazardous Chemicals:** None

**Section 311/312 Hazard Category:** Immediate health, chronic health

**Section 313 Toxic Chemicals:** Hydrochloric acid

### State Regulations

### International Regulations

WHMIS Controlled Product Hazard Class: D1A, E

## 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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