

REC'D FEB 15 1999

MSDS #N17

6116

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration

(Non-Mandatory Form) *CHM00135*

Form Approved

OMB No. 1218-0072 *X46010087-010*



IDENTITY (As Used on Label and List)
 HYDRO-BALANCE HYDRO-FOAM CONCENTRATE

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I (#H-501) #H-506 #H-555

Manufacturer's Name North American Research Corporation	Emergency Telephone Number (972) 492-1800	During Transit-INFOTRAC 800-535-5053
Address (Number, Street, City, State, and ZIP Code) P.O. Box 1318 Lewisville, TX 75067	Telephone Number for Information (972) 492-1800	Date Prepared 1/12/98
	Signature of Preparer (optional) <i>George Miller</i>	

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
*Hydrofluoric Acid (CAS #7664-39-3)	3ppm as F	3ppm as F	6ppm as F	< 20
*Phosphoric Acid (CAS #7664-38-2)	1mg/m ³	1mg/m ³	3mg/m ³	< 20

NFPA HAZARD RATING: "4" Health "0" Flammable "1" Reactivity "Acid" Specific Hazard	pH = 1.0	SHIPPING DESCRIPTION: CORROSIVE LIQUID, ACIDIC, INORGANIC, NOS (HYDROFLUORIC ACID)(PHOSPHORIC ACID), 8, UN 3264, PG II
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If the hazardous ingredients are listed with an asterisk*, the ingredient is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments & Reauthorization Act of 1986 & 40CFR Part 372.

Section III — Physical/Chemical Characteristics

Boiling Point	150°F	Specific Gravity (H ₂ O = 1)	1.04
Vapor Pressure (mm Hg.) @ 25°C	110	Melting Point	N/A
Vapor Density (AIR = 1) @ 70°F	2.21	Evaporation Rate (Butyl Acetate = 1)	Not Det.
Solubility in Water	Miscible		
Appearance and Odor	Reddish liquid; Acidic to pungent odor		

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Not Flammable	Flammable Limits	LEL N/D	UEL N/D
Extinguishing Media	Not flammable. Use water spray to keep containers cool. Use appropriate media on surrounding fire.			
Special Fire Fighting Procedures	Wear self-contained breathing apparatus (NIOSH approved) & full protective clothing. Do not use water spray on leaking containers.			
Unusual Fire and Explosion Hazards	Reaction with alkalis will generate considerable heat and toxic gases. Reaction with some metals, i.e. Aluminum, will generate Hydrogen GAs. Heat increases container pressure and may cause rupturing at container.			

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Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid	High heat
	Stable	X		

Incompatibility (Materials to Avoid) Cyanides, Sulfides and some oxides

Hazardous Decomposition or Byproducts
Does not decompose. Boils away as hydrogen fluoride gas and water vapor.

Hazardous Polymerization	May Occur		Conditions to Avoid	N/A
	Will Not Occur	X		

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? X Skin? X Ingestion? X

Health Hazards (Acute and Chronic)
May be a chronic health hazard. Product can cause burns which may not be immediately painful or visible.
Wearing contaminated clothing such as shoes & gloves may result in painful delayed effects. INHALATION of vapors over TLV limits may cause damage to respiratory system and cause pulmonary edema.

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

Signs and Symptoms of Exposure
Vapor can cause skin irritation. Inhalation of vapors may cause damage to lungs and respiratory system and pulmonary edema. SKIN CONTACT: wash with copious amounts of water. EYE CONTACT: flush eyes immediately with large quantities of clean water while holding the eyelids apart. Ask patient if allergic to novacaine. Apply 2 drops or ophthaine in affected eye. Do not rub for 2-3 hours. Irrigate eye for 20 minutes with 1% aqueous solution of sodium gluconate. See physician at once.

Medical Conditions Generally Aggravated by Exposure
Use no oils or ointments. VAPOR INHALATION: remove patient to fresh air. If TLV is exceeded, wear OSHA permissible mask or NIOSH positive pressure mask. INGESTION: DO NOT induce vomiting. Immediately drink a

Emergency and First Aid Procedures
large quantity of milk or water with added Milk of Magnesia. Call a physician. Gastric lavage with lime water or milk may be performed by a physician only.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
Contain spills and leaks, neutralize with soda ash or lime. Small spills may be absorbed with sand, dirt or an absorbent. Larger spills if contained, consider recycling.

Waste Disposal Method
Dispose of in accordance with federal, state and local regulations.

Precautions to Be Taken in Handling and Storing
Store in well ventilated area away from heat, sparks and flames. Keep container closed tightly. Do Not store near alkalis. AVOID breathing vapors and always wear protective equipment when handling.

Other Precautions For Professional, Industrial & Institutional use only. For outdoor use only. Read entire label before using. Keep out of reach of children. Protective equipment: chemical splash goggles, PVC or Neoprene Gauntlet gloves, footgear, longsleeve coveralls, or rubber apron. Wash hands thoroughly before eating, drinking or using restroom after handling. Do Not smoke, eat or drink in work area. Always apply product down wind.

Section VIII — Control Measures

Respiratory Protection (Specify Type)
Use only in well ventilated areas (Outdoors). If exposure limits are exceeded use OSHA permissible chemical mask.

Ventilation	Local Exhaust	N/A	Special	N/A
	Mechanical (General)	N/A	Other	For outdoor use only.

Protective Gloves PVC or Neoprene gloves Eye Protection Chemical goggles or chemical faceshield

Other Protective Clothing or Equipment Longsleeves or apron

Work/Hygienic Practices
Wash hands thoroughly (especially under the fingernails) after use and before eating, smoking or using restrooms.