

Material Safety Data Sheet

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

REC'D SEP 07 1999

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)

Form Approved

OMB No. 1218-0072

6126
CHM00133

X46010085-010

IDENTITY (As Used on Label and List)

H-4X01, H-4X08,

H-4X32

Hydro-Balance 4-X Base™

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

Manufacturer's Name

North American Research Corporation

Address (Number, Street, City, State and ZIP Code)

P.O. Box 1318

Lewisville, TX 75067

Emergency Telephone Number

(972) 492-1800

During Transit - Infotrac

(800) 535-5053

Telephone Number for Information

(972) 492-1800

Date Prepared

July 20, 1999

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Potassium Hydroxide (CAS# 1310-58-3)	2mg/m ³	2mg/m ³	N/A	< 70

NFPA Hazard Rating:

3 Health

0 Flammability

1 Reactivity

DOT Shipping Name:

a.) Consumer Commodity ORM-D

For domestic, ground shipments of packages no more than 66 pounds, gross weight, and in inner packages not over 0.3gallon.

b.) Potassium Hydroxide Solution, 8, UN 1814, PG II

For all other shipments.

If the hazardous ingredients are listed with an asterisk (*), the ingredient may be subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. (RQ - 1000 lbs.)

Section III - Physical/Chemical Characteristics

Boiling Point	212°F	Specific Gravity (H ₂ O=1)	1.42
Vapor Pressure @ 104°F	6.3	Melting Point	N/A
Vapor Density	N/A	Evaporation Rate (Butyl Acetate = 1)	Not Det.
Solubility in Water	pH = 13.5		
Complete			

Appearance and Odor

Semi-viscous, clear to yellowish liquid; odorless.

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Not flammable		N/A	N/A

Extinguishing Media

Water spray, foam, carbon dioxide, or dry chemicals may be used by firefighters in areas where this product is stored.

Special Fire Fighting Procedures

Protective clothing and self contained breathing apparatus should be worn by firefighters in areas where this product is stored.

Unusual Fire and Explosion Hazards

Alkaline vapors may be released when the boiling point is reached. This product will react with some metals, e.g. aluminum, tin, zinc to form flammable hydrogen gas.

(Reproduce Locally)

OSHA 174, Sept. 1985

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid None
	Stable	X	

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Incompatibility (Materials to Avoid)

Avoid storing or mixing with acids, aldehydes and organic chemicals.

Hazardous Decomposition or Byproducts

None

Hazardous Polymerization	May Occur		Conditions to Avoid None
	Will Not Occur	X	

Section VI - Health Hazard Data

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

Health Hazards (Acute and Chronic) Acute: Corrosive to all body tissues with which it comes in contact.

Chronic: Multiple areas of superficial destruction of the skin or primary irritant dermatitis may persist. Inhalation of dust, spray, or mist may result in varying degrees of irritation or damage to the respiratory tract tissues and an increased susceptibility to respiratory illness.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	NO	NO	YES

Signs and Symptoms of Exposure

Will cause redness, irritation, and possible skin burns if this product is not removed immediately from the affected area.

Medical Conditions

Generally Aggravated by Exposure Existing dermatitis

Emergency and First Aid Procedures

Wash contaminated areas with plenty of water. Flush eyes for at least 15 minutes and get medical attention.

Internal: Drink large quantities of water or milk. Get medical attention.

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Contain liquid and prevent discharges to streams or sewer systems. Clean area immediately.

Waste Disposal Method

Shipment, storage, and/or disposal of waste materials are regulated and action to handle spills or releases must meet

all federal, state, and local regulations.

Precautions to Be Taken in Handling and Storing

Do not store near acids. Keep container tightly closed. Avoid excessive heat (110°F)

Other Precautions

Read entire label before use. Keep out of reach of children. For professional, industrial, and institutional use only.

Use outdoors only and spray downwind to avoid misting.

Section VIII - Control Measures

Respiratory Protection (Specify Type)

Use only in well ventilated areas. If TLV is exceeded, use OSHA approved respirator.

Ventilation	Local Exhaust	As required to maintain < TLV	Special	N/A
	Mechanical (General)	As required to maintain < TLV	Other	N/A

Protective Gloves	Rubber	Eye Protection	Safety goggles and face shield
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Other Protective Clothing or Equipment

Rubber apron

Work/Hygienic Practices

Wash hand thoroughly after use and before eating, drinking, or using the restroom.