

SAFETY DATA SHEET

Hi-Per

Prep. Date: March 25, 2014

Rev. Date: March 20, 2019

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Identification: Wayne Concept
5005 Speedway Drive
Fort Wayne, IN 46825
Phone: (260)482-8615
Fax: (260)483-5598

24 Hour Emergency Telephone Number: INFOTRAC (800)535-5053

Trade Name: Hi-Per
SDS#: 870
Product Use: Alkaline detergent

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Color: Violet
Physical State: Liquid
Odor: Solvent odor

Signal Word: **DANGER**

GHS Classification: Acute Toxicity; Category 3
Severe Eye Damage/Irritation; Category 1
Skin Corrosion/Irritation; Category 1



Hi-Per

MAJOR HEALTH HAZARDS: CORROSIVE. CAUSES BURNS TO THE RESPIRATORY TRACT, SKIN, EYES AND GASTROINTESTINAL TRACT. CAUSES PERMANENT EYE DAMAGE. EFFECTS OF CONTACT OR INHALATION MAY BE DELAYED.

PHYSICAL HAZARDS: Mixing with water, acid or incompatible materials may cause splattering and release of heat. Do not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated.

ECOLOGICAL HAZARDS: This material has exhibited moderate toxicity to aquatic organisms.

PRECAUTIONARY STATEMENTS: Do not get in eyes, on skin, or on clothing. Do not breathe vapor or mist. Keep container tightly closed. Wash thoroughly after handling. Use with adequate ventilation .

POTENTIAL HEALTH EFFECTS:

Inhalation: May cause severe irritation of the respiratory tract with coughing, choking, pain and possibly burns of the mucous membranes.

Skin contact: Causes skin burns.

Eye contact: Causes serious eye damage.

Ingestion: Causes burns.

Chronic Effects: None known.

Medical Conditions Aggravated by Exposure: Respiratory system (including asthma and other breathing disorders).

See Section 11: TOXICOLOGICAL INFORMATION

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	%	CAS Number
Potassium hydroxide	1 - 5	1310-58-3
Ethylene glycol monobutyl ether	5 - 10	111-76-2
Sodium xylene sulfonate	1 - 5	1300-72-7
Linear alcohol ethoxylate	1 - 5	68439-46-3
Cocobis (2-hydroxyethyl) Methyl ammonium chloride	1 - 5	70750-47-9

4. FIRST AID MEASURES

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. If respiration or pulse has stopped, have a trained person administer basic life support (Cardio-Pulmonary Resuscitation and/or Automatic External Defibrillator) and CALL FOR EMERGENCY SERVICES IMMEDIATELY.

SKIN CONTACT: Immediately flush contaminated areas with water. Remove contaminated clothing, jewelry and shoes. Wash contaminated areas with soap and water. Thoroughly clean and dry contaminated clothing before reuse. Discard contaminated leather goods. GET MEDICAL ATTENTION IMMEDIATELY.

EYE CONTACT: Immediately flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissues. Washing eyes within several seconds is essential to achieve maximum effectiveness. GET MEDICAL ATTENTION IMMEDIATELY.



Hi-Per

INGESTION: Never give anything by mouth to an unconscious or convulsive person. If swallowed, do not induce vomiting. Give large amounts of water. If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops. GET MEDICAL ATTENTION IMMEDIATELY.

Notes to Physician: The absence of visible signs or symptoms of burns does NOT reliably exclude the presence of actual tissue damage. Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE-FIGHTING MEASURES

Fire Hazard: Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. May react with chemically reactive metals such as aluminum, zinc, magnesium, copper, etc. to release hydrogen gas which can form explosive mixtures in air.

Extinguishing Media: Use extinguishing agents appropriate for surrounding fire.

Fire Fighting: Move container from fire area if it can be done without risk. Cool containers with water. Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode. Avoid contact with skin.

Sensitivity to Mechanical Impact: Not sensitive.

Sensitivity to Static Discharge: Not sensitive.

Flash point: Not flammable

6. ACCIDENTAL RELEASE MEASURES

Occupational Release: Wear appropriate personal protective equipment recommended in Section 8 of the SDS. Completely contain spilled material with dikes, sandbags, etc. Keep out of water supplies and sewers. Liquid material may be removed with a vacuum truck. Flush spill area with water, if appropriate. This material is alkaline and may raise the pH of surface waters with low buffering capacity. Releases should be reported, if required, to appropriate agencies.

7. HANDLING AND STORAGE

Storage Conditions: Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Do not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated. Keep separated from incompatible substances (see Section 10 of SDS).

Handling Procedures: Avoid breathing vapor or mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. When mixing, slowly add to water to minimize heat generation and spattering.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Regulatory Exposure Limit(s): Ethylene glycol monobutyl ether: 20 ppm TWA (ACGIH)

Hi-Per

Non-Regulatory Exposure Limit(s): As listed below

Component	CAS Number	ACGI H TWA	ACGI H STEL	ACGIH Ceiling	OSHA TWA (Vacated)	OSHA STEL (Vacated)	OSHA Ceiling (Vacated)
Potassium hydroxide	1310-58-3	-----	-----	2 mg/m ³	-----	-----	2 mg/m ³

- The Non-Regulatory United States Occupational Safety and Health Administration (OSHA) limits shown in the table are the Vacated 1989 PEL's (vacated by 58 FR 35338, June 30, 1993).

- The American Conference of Governmental Industrial Hygienists (ACGIH) is a voluntary organization of professional industrial hygiene personnel in government or educational institutions in the United States. The ACGIH develops and publishes recommended occupational exposure limits each year called Threshold Limit Values (TLVs) for hundreds of chemicals, physical agents, and biological exposure indices.

ENGINEERING CONTROLS: Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: Wear chemical safety goggles with a faceshield to protect against eye and skin contact when appropriate. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin and Body Protection: Wear protective clothing to minimize skin contact. When potential for contact with wet material exists, wear Tychem® or similar chemical protective suit. When potential for contact with dry material exists, wear disposable coveralls suitable for dust exposure, such as Tyvek®. Always place pants legs over boots. Thoroughly clean and dry contaminated clothing before reuse. Discard contaminated leather goods.

Hand Protection: Wear appropriate chemical resistant gloves.

Protective Material Types: Butyl rubber, Natural rubber, Nitrile, Polyvinyl chloride (PVC), Tychem®, Tyvek®

Respiratory Protection: A NIOSH approved respirator with N95 dust/mist filter (1/2 facepiece) or N100 dust/mist filter (full facepiece) cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. If eye irritation occurs, a full face style mask should be used. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Appearance:	Clear
Color:	Violet
Odor:	Solvent odor
Flash point:	Not flammable
Boiling Point/Range:	200°F
Freezing Point/Range:	Not determined
Vapor Pressure:	Not determined
Vapor Density (air=1):	Not determined
Evaporation Rate:	About the same as water
Specific Gravity (water=1):	1.047
Density:	8.71 lbs/gal
Water Solubility:	Complete
pH:	13.2 ±0.5

10. STABILITY AND REACTIVITY

Reactivity/ Stability: Stable at normal temperatures and pressures.

Conditions to Avoid: Mixing with water, acid, or incompatible materials may cause splattering and release of large amounts of heat. Will react with some metals forming flammable hydrogen gas. Carbon monoxide gas may form upon contact with reducing sugars, food and beverage products in enclosed spaces.

Incompatibilities/ Materials to Avoid: Acids, Flammable liquids, Halogenated compounds, Prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys

Hazardous Decomposition Products: None known

Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

Component	LD50 Oral:	LC50 Inhalation:	LD50 Dermal:
Potassium hydroxide	214 mg/kg (Rat)	-----	-----
Sodium xylene sulfonate	>5 g/kg (rat)	-----	>2 g/kg (rabbit)
Ethylene glycol monobutyl ether	1.2 g/kg (guinea pig)	>633 ppm, 1 h (guinea pig)	400 – 500 mg/kg (rabbit)
Linear alcohol ethoxylate	214 mg/kg (rat)	-----	-----

TOXICITY:

When in solution, this material will affect all tissues with which it comes in contact. The severity of the tissue damage is a function of its concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur. This material is a strong irritant and is corrosive to the skin, eyes, and mucous membranes. This material may cause severe burns and permanent damage to any tissue with which it comes into contact.

CARCINOGENICITY: This product is not classified as a carcinogen by NTP, IARC or OSHA.

12. ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

Aquatic Toxicity:

This material is alkaline and may raise the pH of surface waters with low buffering capacity.
This material has exhibited moderate toxicity to aquatic organisms.

Toxicity data for components:

Potassium hydroxide:

Freshwater Fish Toxicity:

LC50 (Mosquito fish): 80 mg/L/96 hr (static bioassay in fresh water at 18-19 C)
LC50 (Fathead Minnow): 179 mg/L/96 hr (static at 22.3-24.7C)

Hi-Per

Invertebrate Toxicity:

EC50 (Daphnia magna): 60 mg/L/48 hr (static bioassay at 20.3-20.7 C)

Algae Toxicity:

ErC50 (Selenastrum capricornutum): 61 mg/L/96 hr (static bioassay at 23-23.9 C)

Linear alcohol ethoxylate

LC50 (fathead minnow): 6 mg/l/96 hr

EC50 (Daphnia): 1-10 mg/l/48hr

EC50 (Skeletonema costatum): 1-10 mg/l/72hr

EC50 (Nitrifying bacteria): 410 mg/l/4hr

FATE AND TRANSPORT:

BIODEGRADATION: This material will disassociate into ionic form in the aquatic environment. Natural carbon dioxide will slowly neutralize this material.

BIOCONCENTRATION: This material will not bioconcentrate.

ADDITIONAL ECOLOGICAL INFORMATION: This material has exhibited slight toxicity to terrestrial organisms.

ECOLOGICAL HAZARDS: This material has exhibited moderate toxicity to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Reuse or reprocess, if possible. Dispose in accordance with all applicable regulations. May be subject to disposal regulations.

14. TRANSPORT INFORMATION

U.S. DOT 49 CFR 172.101:

PROPER SHIPPING NAME: Potassium hydroxide, solution

UN NUMBER: UN1814

HAZARD CLASS/ DIVISION: 8

PACKING GROUP: II

LABELING 8

REQUIREMENTS:

RQ (lbs): RQ 1,000 Lbs. (Potassium hydroxide)

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:

SHIPPING NAME: Potassium hydroxide, solution

UN NUMBER: UN1814

CLASS OR DIVISION: 8

PACKING/RISK GROUP: II

15. REGULATORY INFORMATION

U.S. REGULATIONS

OSHA REGULATORY STATUS:

- This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):

- If a release is reportable under CERCLA section 103, notify the state emergency response commission and local emergency planning committee. In addition, notify the National Response Center at (800) 424-8802 or (202) 426-2675

Component	CERCLA Reportable Quantities:
Potassium hydroxide	1000 lb (final RQ)

SARA EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30): Not regulated

SARA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.10):

Acute Health Hazard

SARA SECTION 313 (40 CFR 372.65): Components listed below.

Ethylene glycol monobutyl ether

OSHA PROCESS SAFETY (PSM) (29 CFR 1910.119): Not regulated

FDA: This material has Generally Recognized as Safe (GRAS) status under specific FDA regulations. Additional information is available from the Code of Federal Regulations which is accessible on the FDA's website. This product is not produced under all current Good Manufacturing Practices (cGMP) requirements as defined by the Food and Drug Administration (FDA).

NATIONAL INVENTORY STATUS

U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA): All components are listed or exempt

TSCA 12(b): This product is not subject to export notification

Canadian Chemical Inventory: Canadian Chemical Inventory:

STATE REGULATIONS

California Proposition 65: This product is not listed, but it may contain impurities/trace elements known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act.

Potassium hydroxide	
California Proposition 65 Cancer WARNING:	Not Listed
California Proposition 65 CRT List - Male reproductive toxin:	Not Listed
California Proposition 65 CRT List - Female reproductive toxin:	Not Listed
Massachusetts Right to Know Hazardous Substance List	Potassium hydroxide
New Jersey Right to Know Hazardous Substance List	Potassium hydroxide; Ethylene glycol monobutyl ether

Hi-Per

New Jersey Special Health Hazards Substance List	corrosive
New Jersey - Environmental Hazardous Substance List	Not Listed
Pennsylvania Right to Know Hazardous Substance List	Potassium hydroxide; Ethylene glycol monobutyl ether
Pennsylvania Right to Know Special Hazardous Substances	Not Listed
Pennsylvania Right to Know Environmental Hazard List	Potassium hydroxide
Rhode Island Right to Know Hazardous Substance List	Potassium hydroxide

CANADIAN REGULATIONS

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations

WHMIS - Classifications of Substances:

- E - Corrosive material
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16. OTHER INFORMATION

Prepared by: Wayne Concept

HMIS: (SCALE 0-4) (Rated using National Paint & Coatings Association HMIS: Rating Instructions, 2nd Edition)

Health: 3 **Flammability:** 0 **Reactivity:** 0
Personal Protection: B

NFPA 704 - Hazard Identification Ratings (SCALE 0-4)

Health: 3 **Flammability:** 0 **Reactivity:** 0

IMPORTANT:

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OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Safety Data Sheet available to your employees.