Section I - General Information

(000000-0000000-- 0058) Date of Issue: 10/15/2007 12:00:00 AM

Chemical Name & Synonyms: Potassium Hydroxide Chemical Family:

Aqueous caustic solution Manufacturer Name: CHEMSEARCH DIV OF NCH CORP

Manufacturer Address:

BOX 152170 IRVING, TX 75015

Prepared By:

M MCDOWELL/CHEMIST

\$ Ceiling limit

Supercedes: 11/3/2005 12:00:00 AM

Trade Name & Synonyms: RED STREAK (32 OZ), M/M

Formula is a mixture: [\lambda]

Product Code Number: 0058

Emergency Phone Number:

800-424-9300

Section II - Hazardous Ingredients

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

Chemical Name (Ingredients) POTASSIUM HYDROXIDE

Hazard CORROSIVE TLV

PEL

STEL

CAS #

2 mg/m3 \$1 2 mg/m3 \$2 2 mg/m3 \$1 1310-58-3

Section III - Physical Data

Boiling Point (°F):235-292 Vapor Pressure (mm Hg):2 Vapor Density (Air=1):0.6 рн @ 100% :₁₄ % Volatile by Volume:50 H,0 Solubility:Complete

Specific Gravity (H20=1):1.46 Color:Colorless Odor:Odorless Clarity: Transparent Evaporation Rate (BuAc=1):0.1

 ${\tt Viscosity:}_{{\tt Non-viscous}}$

Section IV - Fire and Explosion Hazard

Flash Point: Non-flam Flammable Limits: Hydrogen gas

LEL: 4%

Method Used: N/A

UEL: 75%

Aerosol Level (NFPA 30B): $\ensuremath{\mathtt{N}}/\ensuremath{\mathtt{A}}$

-Extinguishing Media: -

[√] Foam [√] Dry Chemical [√] Alcohol Foam [√] CO2 [√] Water Spray [] Other -NFPA 704 Hazard Rating: -4-Extreme 2-Moderate

3-High

Flammability: 1 1-Slight 0-Insignificant

Instability: 2

Special:

Special Fire Fighting Procedures:

Firefighters should wear a self-contained breathing apparatus and full protective gear. Extinguishing media should be chosen based on the nature of the surrounding fire. Cool fire-exposed containers with water spray to prevent bursting.

Unusual Fire and Explosion Hazards:

The use of water spray (fog), while effective, may cause frothing and foaming. Never use a water jet as this will just spread the fire. Prolonged contact with reactive metals, such as Aluminum, Copper, Brass, Bronze, Chromium, Magnesium, Tin, Zinc, and alloys, can cause the formation of flammable Hydrogen Gas which can form an explosive mixture with air. Use care as spills may be slippery.

Section V - Health and Hazard Data

Threshold Limit Value:

2 mg/m3 as Ceiling Limit for Potassium Hydroxide.

Effects of Overexposure:

Acute: (Short Term Exposure)

EYE CONTACT: Corrosive. Causes burns, corneal damage, and possible blindness.

SKIN CONTACT: Corrosive. Causes burns and possible deep ulcerations or scarring. Burns may not be immediately visible or painful.

INHALATION: Causes burns to the respiratory tract, nose, mouth, and throat with discomfort, nasal discharge, sneezing, coughing, rapid heartbeat, and chest pain. Inhalation of mist may cause chemical pneumonitis which can cause damage and may be fatal.

INGESTION: Corrosive. Causes burns to the mouth, throat, esophagus, and stomach with nausea and pain. Symptoms may include vomiting of blood. Blood loss through damaged tissue can lead to low blood pressure and shock, and may be fatal.

Chronic: (Long Term Exposure)

May cause bronchopneumonia, chemical pneumonitis, pulmonary edema, delayed scarring of the airway, and other affected organs.

Medical conditions aggravated by exposure are pre-existing respiratory and skin conditions such as asthma, emphysema, and dermatitis.

TARGET ORGANS: None known. There is no primary route of entry into the body. The primary routes of exposure are skin and eye contact.

_ n	~	Routes	~ f	Enter:						
-	TIMAL	Routes	OL	FIICLY						
[] Inh	alation			[]	Ingestion	[]	Absorption

Emergency First Aid Procedures:

Inhalation:

Remove from the area to fresh air. If not breathing, clear the airway and start mouth to mouth artificial respiration. Get immediate medical attention.

Immediately rinse the eyes with water. Remove any contact lenses and continue flushing for at least 15 minutes. Hold the eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Get immediate medical attention.

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Chin Contact

Immediately remove contaminated clothing and shoes. Flush affected areas with large amounts of water for 20 to 30 minutes. Get immediate medical attention. Discard clothing and shoes.

Ingestion

Give 3 to 4 glasses of water, but DO NOT induce vomiting. If vomiting occurs, give fluids again. Get immediate medical attention. Do not give anything by mouth to an unconscious or convulsing person.

Notes to Physician:

Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsions may be needed.

Section VI - Toxicity Information

г	Product Contain	ns Chemicals Listed as Carcin	ogen or Potential Carcinog	gen By:		
	[] IARC	[] NTP	[] OSHA	[] ACGIH	[] Other	

VOC content: 0% by weight, 0% by volume, 0 q/l

POTASSIUM HYDROXIDE SKN-HMN SDT: 50 mg/24h severe 4. ORL-RAT LD50: 273 mg/kg 4. SKN-RBT SDT: 50 mg/24h severe 4. EYE-RBT rinsed with water: 1 mg/24h moderate 4.

Mice painted with a 3 to 6% aqueous solution for 46 weeks developed skin tumors. This study was conducted in 1925 and the adequacy of the test and its design are unkown. 3.

Section VII - Reactivity Data

Incompatibility (Materials to Avoid):

Prolonged contact with reactive metals, such as Aluminum, Copper, brass, bronze, Chromium, Magnesium, Tin, Zinc, and alloys, can cause the formation of flammable Hydrogen gas which can form an explosive mixture with air. Strong oxidizing agents such as chlorine bleach and concentrated hydrogen peroxide; acids, acrolein, acrylonitrile, aldehydes, chlorinated hydrocarbons, Chlorine Dioxide, leather, Maleic Anhydride, Nitroethane, Nitroparaffins, 2-Nitrophenol, Nitropropane, organic halogen and nitro compounds, Phosphorus, Potassium Persulfate, Tetrahydrofuran, and wool. Trichloroethylene will react to form Dichloroacetylene which is spontaneously flammable.

Hazardous Decomposition Products:

Oxides of Carbon and Potassium.

Section VIII - Spill Or Leak Procedures

Steps to be Taken if Material is Released or Spilled:

Wear appropriate protective clothing. Use care as spills may be slippery. Shut off source of leak. Dike and contain spill. Absorb with an inert material and transfer all material into a properly labeled container for disposal. Prevent product from contaminating soil or from entering sewage and drainage systems and bodies of water. Flush area with water.

Waste Disposal Method(s):

Dispose of in accordance with all Federal, state, and local regulations.

Neutralizing Agent

Use dilute acids such as Hydrochloric Acid or vinegar. Add cautiously while mixing. Wear appropriate protective clothing.

Section IX - Special Protection Information

Required Ventilation:

Local ventilation is recommended to control exposure from operations that can generate excessive levels of mists. Local ventilation is preferred, because it prevents dispersion into work areas by controlling it at its source.

Respiratory Protection:

Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (288.2-1992). For concentrations above the TLV and/or PEL but less than 10 times these limits, a NIOSH approved half-facepiece respirator equipped with appropriate chemical cartridges may be used. For concentrations greater than 10 times the TLV and/or PEL, consult the NIOSH respirator decision logic found in publication No. 87-116 or ANSI 288.2-1992.

Glove Protection

Neoprene or nitrile rubber gloves should be worn. Ensure compliance with OSHA's personal protective equipment (PPE) standard for hand protection, 29 CFR 1910.138.

Eye Protection:

Chemical goggles and a face shield should be worn when handling. Ensure compliance with OSHA's Personal Protective Equipment (PPE) standard for eye and face protection, 29 CFR 1910.133.

Other Protection:

Wear protective clothing when handling. A safety shower and an eyewash station should be available.

Section X - Storage and Handling Information

-Storage Temperature	7	Storage Conditions						
Max: 120°F Min: 60°F		[√] Indoors	[] 01	itdoors	[]] Heated	[] Refrigerated

Precautions to be Taken in Handling and Storing:

Always store material in its original container in a cool, dry, well-ventilated area, out of direct sunlight. Do not store in aluminum or galvanized containers. Keep container tightly closed when not in use. Keep from freezing. If product freezes, allow it to slowly warm to room temperature and stir

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thoroughly before using.

Other Precautions:

Keep out of reach of children. Read the entire label before using the product. Follow the label directions.

Section XI - Regulatory Information

Chemical Name

None.

CAS Number

Upper % Limit

Those Ingredients listed above are subject to the reporting requirements of 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40

CFR part 372. Please call 1-800-527-9919 for additional information if you are a California customer. This MSDS is not intended for users in the state of California.

Section XII - References

- 1. Threshold Limit Values for chemical substances and physical agents and biological exposure indices, ACGIH, 2007.

1. Threshold limit values for chemical substances and physical agents and biological exposure indices, ACGIH, 2007.
2. OSHA PEL.
3. Vendor's MSDS.
4. Registry of toxic effects of chemical substances, CCINFOWeb, 2007.
5. European Chemical Substances Information System (ESIS), International Uniform Chemical Information Database (IUCLID) Chemical Data Sheets.
All the components of this product are in compliance with the Toxic Substances Control Act (TSCA) and are either listed on the TSCA inventory or otherwise exempted from listing.

IRR: Irritant, OSHA: Occupational Safety & Health Administration, IARC: International Agency for the Research on Cancer, TOX: Toxic, NFPA: National Fire Protection Association, ppm: Parts Per Million, UEL: Upper Explosion Limit, STEL: Short-term Exposure Limit, SKN: Skin, IHL: Inhalation, COMB: Combustible, CORR: Corrosive, MOT: Mutagenic, CARC: Carcinogenic, N/A: Not Applicable, TLV: Threshold Limit Value, N/E: Not Established, ORL: Oral, FLAM: Flammable, ASPHYX: Asphyxiant, C.O.C.: Cleveland Open Cup, PNOR: Particles Not Otherwise Regulated, LEL: Lower Explosion Limit, mg/L: Milligrams per Liter, PNOS: Particles Not Otherwise Specified, g/L: Grams per Liter, PMCC: Pensky-Martin Closed Cup, NTP: National Toxicology Program, µg/L: Micrograms per Liter, TCC: Tagliabue Closed Cup, SEV: Severe, RBT: Rabbit, INV: Intravenous, ACGIH: American Conference of Governmental Industrial Hygienists, PEL: Permissible Exposure Limit, MOD: Moderate, IPT: Intraperitoneal, gm/kg: Grams per Kilogram, C.C.C.: Cleveland Closed Cup, HMN: Human, mg/m3: Milligrams per Cubic Meter, mg/kg: Milligrams per Kilogram, VOC: Volatile Organic Compound, SDT: Standard Draize Test, MSE: Mouse, GPG: Guinea Pig.

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