MATERIAL SAFETY DATA SHEET: STRONG ARM

DATE OF ISSUE: 05/22/2000

SUPERCEDES: 04/16/1999

SECTION I - GENERAL INFORMATION

Chemical Name & Synonyms:

Trade Name & Synonyms:

N/A

STRONG ARM

Chemical Family:

Formula Mixture: X

CAUSTIC/ GLYCOL BLEND

Manufacturer's Name:

CHEMSEARCH DIV. OF NCH CORP.

Address:

BOX 152170

IRVING. TX 75015

Prepared By:

Product Code Number

0298

Emergency Phone Number

R STOLLEY/CHEMIST

800-424-9300

SECTION II - HAZARDOUS INGREDIENTS

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

| Chemical Name (Ingredients) | Hazard | TLV | PEL | STEL | CAS# |
|-----------------------------|-----------|-------------|------------|----------|-----------|
| POTASSIUM HYDROXIDE | CORROSIVE | 2 MG/M3\$ 1 | NOT EST. 2 | NOT EST. | 1310-58-3 |
| PROPYLENE GLYCOL | IRRITANT | NOT EST. 1 | NOT EST. 2 | NOT EST. | 57-55-6 |
| \$ ACGIH CEILING LIMIT | | | | | |

SECTION III - PHYSICAL DATA")%> 150 Specific Gravity (H20=1): **Boiling Point (f):** 1.16 Vapor Pressure (MM HG): 18 Color: **OFF-WHITE** Odor: Vapor Density (Air=1): <1 LOW PH @ 100%: 13.3 Clarity **OPAQUE** Evaporation Rate (BU A/C=1): % Volatile by Volume: 81 0.1 COMPLETE **H20 Solubility:** Viscosity: **VISCOUS**

SECTION IV - FIRE AND EXPLOSION HAZARD

Flash Point:

Flammable Limits: HYDROGEN GAS

LEL: 4% UEL: 75%

NON-FLAM /
Extinguishing Media:

Foam:X

Alcohol Foam:X

CO2:X Dry Chemical:X

Water Spray:X

Other:

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.

Unusual Fire and Explosion Hazards:

PROLONGED CONTACT WITH REACTIVE METALS, SUCH AS ALUMINUM, ZINC, MAGNESIUM AND COPPER, CAN CAUSE THE FORMATION OF FLAMMABLE HYDROGEN GAS WHICH CAN FORM AN EXPLOSIVE MIXTURE WITH AIR

NFPA Hazard Rating:

(0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)

Health:2

Flammability:1

Instability:0

Special:

SECTION V - HEALTH HAZARD DATA

Threshold Limit Value:

2 MG/M3 AS POTASSIUM HYDROXIDE (CEILING LIMIT) 1.

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. INHALATION: WHEN HEATED, VAPORS MAY CAUSE BURNS TO THE RESPIRATORY TRACT, NOSE AND THROAT, WITH DISCOMFORT, NASAL DISCHARGE, SNEEZING, COUGHING AND \ CHEST PAIN. INGESTION: CORROSIVE. CAUSES BURNS TO THE MOUTH AND THROAT, NAUSEA, PAIN AND MAY BE FATAL.

-Chronic (Long Term Exposure)

REPEATED CONTACT EVEN WITH DILUTED POTASSIUM HYDROXIDE CAN CAUSE SUPERFICIAL DESTRUCTION OF THE SKIN. TARGET ORGANS: NONE KNOWN. THERE IS NO PRIMARY ROUTE OF ENTRY INTO THE BODY. THE PRIMARY ROUTES OF EXPOSURE ARE SKIN AND EYE CONTACT. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE ARE PRE-EXISTING SKIN CONDITIONS SUCH AS DERMATITIS.

Primary Routes of Entry:

Inhalation:

Absorption:

Emergency and 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.

-Eve Contact:

IMMEDIATELY RINSE THE EYES WITH WATER. REMOVE ANY CONTACT LENSES. HOLD THE EYELIDS APART TO ENSURE RINSING OF THE ENTIRE SURFACE OF THE EYES AND LIDS WITH WATER. CONTINUE FLUSHING FOR AT LEAST 15 MINUTES. GET IMMEDIATE MEDICAL ATTENTION.

-Skin Contact:

IMMEDIATELY REMOVE CONTAMINATED CLOTHING AND SHOES. WASH AFFECTED AREAS THOROUGHLY WITH LARGE AMOUNTS OF SOAP AND WATER FOR AT LEAST 15 MINUTES. GET IMMEDIATE MEDICAL ATTENTION, DISCARD OR CLEAN CLOTHING AND SHOES.

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. TO AN UNCONSCIOUS PERSON.

-Notes to Physician:

PROBABLE MUCOSAL DAMAGE MAY CONTRAINDICATE THE USE OF GASTRIC LAVAGE.

SECTION VI - TOXICITY INFORMATION

Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:

IARC: No

NTP: No

OSHA: No

ACGIH: No

OTHER: No

POTASSIUM HYDROXIDE

EYE-RBT RINSED WITH WATER: 1 MG/24H MODERATE

ORL-RAT LD50: 273 MG/KG 3.

SKN-RBT SDT: 50 MG/24H SEVERE 3.

SKN-HMN SDT: 50 MG/24H SEVERE 3.

MUT: HAMSTER OVARY : 12 MMOL/L

PROPYLENE GLYCOL

3. SKN-HMN SDT: 500 MG/7D MILD

EYE-RBT SDT: 500 MG/24H MILD 3.

ORL-RAT LD50: 20 G/KG 3. 3

SKN-RBT LD50: 20,800 MG/KG

ORL-HMN CHILD TDLo: 79 G/KG/56W-I CONVULSIONS

ORL-RAT TDLo: 88,269 MG/KG/30D-I HYPERGLYCEMIA 3.

MUT. CYTOGENETIC ASSAY-HAMSTER FIBROBLAST: 32 G/L

OTHER LITERATURE SUGGESTS THAT KIDNEY DAMAGE CAN OCCUR WITH HIGH ORAL

DOSES. THE RELEVANCE TO HUMANS IS UNKNOWN.

SECTION VII - REACTIVITY DATA

Stability:

Stable:X

Unstable:

Conditions to Avoid: N/A

Incompatibility (Materials to Avoid):

STRONG OXIDANTS; LEATHER; REACTIVE METALS SUCH AS ALUMINUM, PAINTED SURFACES;GLASS;ACIDS;CHLORINATED SOLVENTS;ORGANIC HYDRIDES.

Hazardous Decomposition Products:

OXIDES OF CARBON UPON THERMAL DECOMPOSITION; HYDROGEN GAS IF IN CONTACT WITH REACTIVE METALS.

Hazardous Polymerization:

May Occur:

Will Not Occur:X

Conditions to Avoid: N/A

SECTION VIII - SPILL OR LEAK PROCEDURES

Steps to be Taken if Material is Released or Spilled:

USE CARE AS SPILLS MAY BE SLIPPERY. DIKE AND CONTAIN SPILL IF SAFE TO DO SO. ABSORB WITH AN INERT MATERIAL AND TRANSFER ALL MATERIAL INTO A PROPERLY LABELED CONTAINER FOR DISPOSAL. WEAR APPROPRIATE PROTECTIVE CLOTHING. PREVENT PRODUCT FROM CONTAMINATING SOIL OR FROM ENTERING SEWAGE AND DRAINAGE SYSTEMS AND BODIES OF 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 MISTS OR VAPORS.

Respiratory Protection:

NORMALLY NOT REQUIRED. A NIOSH/MSHA APPROVED RESPIRATOR IN POORLY VENTILATED AREAS AND/OR FOR EXPOSURE ABOVE THE ACGIH TLV.

Glove Protection:

NEOPRENE OR NITRILE RUBBER GLOVES SHOULD BE WORN.

Eve Protection:

A FACE SHIELD SHOULD BE WORN.

Other Protection:

WEAR PROTECTIVE CLOTHING WHEN HANDLING. A SAFETY SHOWER AND EYEWASH STATION SHOULD BE AVAILABLE.

SECTION X - STORAGE AND HANDLING INFORMATION

Outdoors:

Storage Temperature:

Indoors:X

Heated:

Refrigerated:

Minimum Temperature: 68 F.

Maximum Temperature:120 F.

Precautions to be taken in Handling and Storing:

DO NOT STORE NEAR ALUMINUM, ZINC, ACIDS OR CHLORINATED SOLVENTS. ALWAYS STORE MATERIAL IN ITS ORIGINAL CONTAINER. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE.

Other Precautions

KEEP OUT OF REACH OF CHILDREN. READ THE ENTIRE LABEL BEFORE USING THE PRODUCT. FOLLOW THE LABEL DIRECTIONS. KEEP FROM FREEZING.

SECTION XI - REGULATORY INFORMATION

Chemical Name

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, 1999. 2. OSHA PEL.
- 3. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, CCINFODisc, 2000.
- 4. VENDOR'S MSDS.

ALL COMPONENTS IN THIS PRODUCT CAN BE FOUND IN THE CURRENT TSCA INVENTORY.

IRR:IRRITANT, FLAM/FLAMM:FLAMMABLE, COMB:COMBUSTIBLE, CORR:CORROSIVE CARC:CARCINOGENIC, TOX:TOXIC, N/A:NOT APPLICABLE, N/E:NOT ESTABLISHED, COC:CLEVELAND OPEN CUP, PMCC:PENSKY-MARTIN CLOSED CUP, TCC:TAGLIABUE CLOSEDCUP, LEL:LOWER EXPLOSION LIMIT, UEL:UPPER EXPLOSION LIMIT, NFPA:NATIONAL FIRE PROTECTION ASSOCIATION, IARC:INTERNATIONAL AGENCY FOR THE RESEARCH ON CANCER, NTP:NATIONAL TOXICOLOGY PROGRAM, OSHA:OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION, ACGIH:AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS, TLV:THRESHOLD LIMIT VALUE, PEL:PERMISSIBLE EXPOSURE LIMIT, STEL:SHORT-TERM EXPOSURE LIMIT, MLD:MILD, MOD:MODERATE, SEV:SEVERE, MUT:MUTAGENIC, ASPHYX:ASPHYXIANT, PNOC: PARTICULATES NOT OTHERWISE CLASSIFIED, SDT:STANDARD DRAIZE TEST, ORL: ORAL, HMN: HUMAN, IHL: INHALATION FIED

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