PAGE: 1 ACCT: 888235001 DATE: 12/15/00 PO NBR: SIBDASGHOSH/VC/12-6 CAT NO: LC192001

MATERIAL SAFETY DATA SHEET #130

POTASSIUM HYDROXIDE SOLUTIONS, 10% - 55% W/V, 0.1N - 1.0N Cat # LC19200, LC19220, LC19240, LC19250, LC19260, LC19270, LC19300, LC LC19350 page 1 of 3 SECTION I

COMPONENTS:

LabChem Inc

revised: 3/26/96

200 William Pitt Way

INDEX: D03413457

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Pittsburgh, PA 15238

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SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

NAME: POTASSIUM HYDROXIDE SOLUTIONS, 10% - 55% W/V, 0.1N - 1.0N

(1) potassium hydroxide, 1%-55% W/V KOH / 56.11

FORMULA/F.WT. 1310-58-3

(2) water, balance 7732-18-5

H2O / 18.00

Fire-0 Health-3

NFPA RATING (0-4): Reactivity-1

SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS

Melting pt: Evaporation rate: Vapor Boiling pt: ×: pH: ≺32F Sp. gravity: press: >212F Vapor density: >1 n/a ether

Appearance/Odor: clear, colorless liquid/odorless.

Solubility: water - completely soluble.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

-upper(UEL): Explosion level-lower (LEL): n/a Flash pt: non-flammable Autoignition: n/a n/a

Extinguishing Media: dry chemical, carbon dioxide, water spray or foam.

Firefighting: aqueous solution-negligible fire and explosion hazard when exposed to heat or flame. Move containers if possible, cool with water spray. Avoid breathing corrosive vapors.

SECTION V - REACTIVITY DATA

Stability: stable under normal temperatures and pressures. Material is a strong base (alkali), reacts exothermically with water, in higher concentrations corrosive fumes may be released.

Condition to Avoid: incompatibilities - reacts explosively or violently with

mitric trichloride, phosphorous, chlorine, N-methyl-N-nitrosourea/methylene chloride, N-nitrosomethylene, nitrobenzene, maleic anhydride, tetrahydrofuran,

chlorine dioxide, acrolein acrylonitrile, chloroform/methanol, benzoyl chloride/sodium azide, o-nitrophenol,

ammonium hexachloroplatinate, 1,2-dichloroethylene, nitroparaffins, nitroalkenes, calcium carbide/chlorine, 2,4,6-trinitrotoluene/methanol. Corrosive_action on metal forms flammable hydrogen

Reacts violently with many acids, ignition reaction materials such as sulfates, many organics, carbides.

Hazardous Decomposition/Byproducts: thermal decomposition may release toxic fumes of potassium oxide (reacts with water or steam producing heat, flammable hydrogen gas).

Hazardous Polymerization: not known to occur.

Potassium hydroxide solutions

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SECTION VI - HEALTH HAZARD DATA

Toxicity: severe eye, skin, mucous membrane irritant; corrosive to eye, skin, mucous membrane, respiratory tract.

LD50: 365mg/Kg Oral-rat. Severe skin irritant: 50mg/24hr-human; 50mg/24hr-rabbit; 50mg/24hr-guinea pig.

Moderate irritant: 5mg/24hr-rabbit; 1mg/24hr Eye-rabbit. Mutagenic data -RTECS.

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Carcinogenicity: not classified by OSHA, TARC, NTP.

Exposure Limits: TIN CETLING: TOLH: ACGIH-TWA: -STEL: OSHA-PEL: OTHER: n/a 2mg/M3

Acute Health Hazards: effects vary (concentration, length of exposure) from mild irritation to burns. Inhalation coughing, sore throat, dyspnea, pulmonary edema. Skin - reddening to severe burns. Eyes - irritation to burns with corneal and episcleral destruction. Ingestion - severe pain to mouth, throat, abdomen with vomiting, diarrhea, hematemesis, anorexia, dizziness, collapse, coma and death. Survivors may experience perforation (gastric, esophageal), severe pain, rigidity and hypotension; penetrating burns may continue for several days.

Chronic Health Hazards: bronchial irritation or pneumonia, gastrointestinal disturbance, conjunctivitis with possible corneal burns, dermatitis can occur.

First Aid:

CAS:

alk

Inhalation: move victim to fresh air, give artificial respiration if necessary. Keep victim warm, at rest. Get medical aid at once.

Skin: remove contaminated clothing, immediately wash area with soap and water. Flush with water until chemical is gone (15-20min.). Cover burns with a dry sterile bandage (loose, not tight). Get medical aid at once.

Eyes: immediately flush eyes with water lifting upper/lower lids occasionally until chemical is gone (15-20min.). Cover burns with a loose sterile non-medicated bandage. Get medical aid at

Ingestion: give conscious victim water or milk immediately to dilute alkali. Allow vomiting to occur, DO NOT INDUCE VOMITING (emesis) or gastric lavage. Medical personnel may do esophagoscopy, irrigate injured area with 1% acetic acid to neutralize alkali (Dreisbach, Handbook of Poisoning, 11thEd.).

SECTION VII - PRECAUTION FOR SAFE HANDLING AND USE

Spills or Leaks: absorb spill with inert absorbent (sand, vermiculite, diatomaceous earth), scoop into non-metallic container, label for disposal. Area may be washed down with water. Material may be neutralized to pH7 with suitable agent (weak acid, e.g. citric acid).

Disposal: dispose in accordance with Federal, State, and local regulations.

storage and handling: store capped at room temperature, protect from heat, incompatible materials (see Section V); protect from accumulation of flammable or poisonous gases in storage.

SECTION VIII - CONTROL MEASURES

Respiratory Protection: provide local exhaust or general dilution ventilation to meet Permissable Exposure Limits (PEL). Respirators not required for routine laboratory use. High levels - use supplied air respirator with full facepiece, helmet or hood; self-contained breathing apparatus/full facepiece (SCBA/FF). Firefighting - SCBA/FF press. demand or pos. pressure mode. Potassium hydroxide solutions

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Protective Clothing and Equipment: wear alkali resistant protective clothing, gloves, splash-proof goggles. Provide an eye-wash fountain in the immediate work area. Do not wear contact lenses when working with chemicals.

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ìNote: n/a means "not applicable" or data "not available".Ù