Tem #22

PRODUCT IDENTIFICATION SECTION Vertelles: Clear APPICIELA. Austin Product: Trede Name: ... Ammonium hydroxide solution / ammonia Charactel Name & Synanyms: Ammonia hydroxide / Agus ammonis 4% of NH4CH Formula: Chemical Family: Ammonium hydroxide containing less than 128 NH3 DOT Proper Shipping Name: CAS NO-1336-21-6 NA 2672 ORM-A DOT Hexard Class: Transportation Label/Placard Required: Mona 1000 nounces of active ingredients Reportable Quantity: 412-625-1535 Emergency Phone: James Austin Company Manufacturer's Name: Telephone For information: 412-625-1535 P.O. Box 827 Address: June 18, 1990 Date Prepared: Downieville Road Mars, PA IMBREDIENTS SECTION II CAS NO OSHA PEL ACGIH TLV Percent 7732-18-5 None 96,000% Hone Water 1336-21-6 None 4.000% None (NIH4OH) Ammonium hydroxide PHYSICAL/CHEMICAL DATA SECTION III 0.980 Specific Gravity (Water = 1): Boiling Point: 212°F 11.5 32°F all of Product: Freeze Point: Evenoration Rate (Butyl Acatate = 1): N/A VP of water Vacor Pressure (mm Hg); None Percent Volatile By Volume \$ Vapor Density (Air = 1): NA 100% Solubility in Water: Odon: Typical ammonia aroma Clear liquid Appearance: TYPE V 12° Baume Federal Specification 0-A-451F Product Formulated Based On: FIRE AND EXPLOSION DATA SECTIONIV **Mot Known** Closed Cup Auto Ignition Temp : Flash Poid! (Mathed Used): Over 200°F 25% of ammonia 16% of ammonia UEL : LEL: Flammable Limits: COS Water Form Extinguishing Media: Other Alcohol Form **Dry Chemical** Fire Fighting Procedures: Avaid fumes from spilled or exposed liquid. Be prepared to use MSHA/HIOSH self-contained breathing apparatus and protective clothing. Rapid addition to concentrated mineral acids could create explosive conditions. Unusual Fire And Explosion Hazards: Ammonia gas is flammable in air in concentrations of 16-25% ammonia by volume. Such concentrations could occur if ammonie is hested in a confined area which is not adequately ventilated. HEALTH HAZARD DATA SECTION V Skin? Yes Ingestion? Yes Eyes? Yes Entry Routes: Inhalation? Yes irritant. None ACGIH Threshold Limit Value OSHA Permissible Exposure Limit . None Carcinogen - NTP Program Hone Carcinogen - IARC Program None Respy continuous coughing, runny nose, eye, skin and/or throat irritations. Signs And Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: Skin cuts, burns or abrasions. Irritated eyes. Respiratory aliments.

Emergency First Aid: Eyes: Flush with large quantities of water. Call physician.

Skin: Remove clothing / wash area with water. Ingestion: Do not give liquid if victim is unconscious or drowsy. Otherwise, drink promptly one or two glasses of water. Follow with citrus juice. Avoid alcohol. Call physician immediately.

Call Paison Control Center for information if doctor unavailable.

Jemes Austin Company

June 18, 1990

REACTIVITY DATA SECTION VI

Stable: PSY Stability

Conditions To Avoid:

Heat or direct sunlight.

Incompatibility (Materials To Avoid):

Strong mineral acids.Corrodes copper,zmc, and their alloys.Avoid bleach and lodine. Conditions To Avoid:

N/A

Hazardous Polymerization May Occur: Hazardous Decomposition Or Byproducts: None

ENVIRONMENTAL PROTECTION PROCEDURES SECTION VII

Spill Precautions: Cantain run-off with absorbent materials such as sand or clay and diking. Transfer liquid and absorbent material in approved container. Then flush and mop area with water allowing to air dry. Keep spill out of sewers and open bodies of water.

Diluted solution can be used as a fertilizer. Do not add this product to any irrigation system.

Container Disposal: Triple rinse. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities by burning. If burned stay out of smoke, Do not reuse empty container (bottle,can, bucket). Wrap container and put in trash.

SPECIAL PROTECTION INFORMATON SECTION VIII .

Eve Protection:

... Product is irritating. Wearingoggles or face shield when pouring into missing-container.

Respiratory Protection:

Hot required under normal use conditions for cleaning or laundry preparations.

Skin Protection:

Wear rubber gloves when handling.

Ventilation Recommended: None

Other Protection:

SECTION IX

SPECIAL PRECAUTIONS

Hygenic Practices (Handling / Storage) Avoid heat and direct sunlight. Follow directions on label. Tighten cap securely. Store container upright. Keep away from children. Do not store near food stuffs, water or feed.

Avoid creasing or impacting of side container walls.

Separate from acids, bleaches, soap based products or organic materials.

ADDITIONAL INFORMATION SECTION X

The information below is believed to be accurate and represents the best information currently available to us. However, we make no warrantly of merchantibility or any other warrantly, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.