



HILLSBORO ELEMENTARY SCHOOLS

215 S.E. 6th Ave.
HILLSBORO, OR 97123

MATERIAL SAFETY DATA SHEET CM 0065

SECTION I

PRODUCT CODE NUMBER _____ *TLV: _____
MANUFACTURER'S NAME: Master Chemical EMERGENCY INFORMATION Chemtrec #: 800-424-9300
MANUFACTURER'S ADDRESS: 642 N. Tillamook St., Portland, OR Manufacturer's #: 503-288-6837
PRODUCT: Industrial Ammonia COMMON NAME: _____
GENERIC NAME: _____ CHEMICAL NAME: _____
CHEMICAL FAMILY: Ammonium Hydroxide, ammonia water DOT PROPER SHIPPING NAME: Ammonium Hydroxide
WARNING STATEMENTS: _____

SECTION II - INGREDIENTS

| C.A.S. # | % | TLV |
|-----------------|-----|---|
| NH ₃ | 4 % | 50ppm - odor detectable 700ppm - eye irritation. 1000-6500ppm - for sustained period may be fatal. |

* Threshold limit value set by (A) OSHA, (B) ACGIH, (C) See Section III, (D) Other, (NE) Not Established (Units are in PPM unless otherwise specified)

SECTION III - PHYSICAL DATA

APPROXIMATE BOILING RANGE: 186°F VAPOR PRESSURE: @25°C 600
VAPOR DENSITY: (Air = 1): .72 SOLUBILITY IN WATER: 100%
SPECIFIC GRAVITY: .980 PERCENT VOLATILE: by volume: 4%
EVAPORATION RATE: *butyl acetate = 1 > 1 Appearance and Odor: Water clear appearance; pungent
APPROXIMATE BULK DENSITY: irritation odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA pH: 11.8

LEL: 16% by volume in air (NH₃); UEL: 25% by volume in air (NH₃).
FLASH POINT RANGE: None EXTINGUISHING MEDIA: Water
FIRE FIGHTING PROCEDURES: Dilute with large volumes of water - gas given off due to heat can be explosive. DOT FLAMMIBILITY CLASSIFICATION: DOT Hazard Classification: ORM-A
UNUSUAL FIRE AND EXPLOSION HAZARDS: None except for the gas released from liquid as it is heated.

SECTION V - EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: Immediately flush with lots of running water for 30 minutes.SKIN CONTACT: Immediately flush skin with lots of running water for 30 minutes.INHALATION: Remove to fresh air. Give artificial respiration if not breathing.INGESTION: Do not induce vomiting; if conscious give lots of water; IN ALL CASES GET IMMEDIATE ATTENTION!

SECTION VI - PHYSIOLOGICAL EFFECTS AND HEALTH INFORMATION

ACUTE EFFECTS OSHA Threshold Limit Value: 50 ppm. ACGIH Threshold Limit Value: 25 ppm.

Carcinogen - NTP Program: This material is not considered as carcinogen by either of the agencies.

SYMPTOMS OF EXPOSURE: Inhalation-Coughing, chest pain, and difficulty in breathing may occur with brief exposure.

CHRONIC EFFECTS Eye: Vapors extremely irritating. Contact with mist or liquid severe damage to permanent injury (blindness) could occur. Skin: Will cause irritation - prolonged contact will cause

severe burns and tissue damage. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Persons with pre-existing eye or

pulmonary disease. Do not wear contact lenses when handling ammonia. PRIMARY ROUTES OF ENTRY: Inhalation, Skin

SECTION VII - REACTIVITY DATA

or eye contact.

STABILITY (Conditions to Avoid): Stable. Heat, sparks, and open flames.

INCOMPATIBILITY (Materials to Avoid): Acids, oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS. NH₃ on heating - combustible products probably nitrogen oxygen.

HAZARDOUS POLYMERIZATION (Conditions to Avoid): Will not occur.

SECTION VIII - SPILL OR LEAK PROCEDURES

PROCEDURES IN CASE OF RELEASE OR SPILL: Wear rubber gloves and goggles and proper breathing apparatus if necessary. For small spills or drips, mop or wipe up and dispose of in DOT-approved waste containers. Keep non-neutralized material out of sewers, storm drains, surface waters, and soil.

WASTE DISPOSAL METHOD: Dispose of contaminated product and material used in cleaning spills or leaks in a manner approved for this material. Consult appropriated Federal, State, and Local regulatory agencies to ascertain proper disposal procedures.

NOTE: Empty containers can have residues and are subject to proper waste disposal as above.

SECTION IX - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: NIOSH-approved canister respirator.

VENTILATION: Exhaust ventilation capable of maintaining emissions at the point of use below PEL.

PROTECTIVE GLOVES: Alkali-resistant slicker suit, rubber boots, gloves with gauntlets.

EYE PROTECTION: Chemical goggles and full face shield.

OTHER PROTECTIVE EQUIPMENT: _____

SECTION X - STORAGE AND SPECIAL PRECAUTIONS

HANDLING AND STORING PRECAUTIONS: Store in cool dry place. Vent containers frequently, and more often in warm weather, to relieve pressure. Keep container tightly closed when not in use. Do not use pressure to empty container. DO NOT GET IN EYS, ON SKIN OR ON CLOTHING.

OTHER PRECAUTIONS: Do not cut, grind, weld or drill on or near this container.

Containers, even those that have been emptied, will retain product residue and vapors. Always obey hazard warnings and handle empty containers as if they were full.

SECTION XI - DOCUMENTARY INFORMATION

PRODUCT CODE NUMBER: _____

ISSUE DATE: _____

REPLACES MSDS NUMBER: _____

PREVIOUS PRODUCT CODE NUMBER: _____

PREVIOUSLY ISSUED: _____