MATERIAL SAFETY DATA SHEET

Product Name: HOUSEHOLD AMMONIA

HAZARD RATING: Health: 2 Flammability: 3 Reactivity: 2 Special:

Section I - Producer Information

DIAMOND PRODUCTS, INC.

1216 Bozeman Avenue

INFOTRAC: 1-800-535-5053

Helena, MT 59601

DATE: March, 2002

Section II - Hazardous Ingredients

HAZARDOUS COMPONENTS CAS# PEL(TWA) TLV CARCINOGEN Ammonium Hydroxide 1336-21-6 50 ppm 25 ppm No

(Ammonia in water)

Section III - Physical Data

Boiling Point: 190 - 220°F Specific Gravity: 0.98 g/ml Melting Point: NA Solubility in Water: Complete % Volatile by wt: 5% as Ammonia gas pH: 12

Appearance and Odor: Clear colorless liquid with pungent odor.

Section IV - Fire and Explosion Data

Flash Point: Not available*

Flammable limits in Air, % by Vol. Upper: 25 (Ammonia) Lower: 16 (Ammonia)

Extinguishing Media: Water

Special Fire Fighting Procedures: Cool containers exposed to fire with water.

Unusual Fire and Explosion Hazards: * Releases flammable ammonia gas at all temperatures which can be explosive.

Section V- Reactivity Data

Stability: Stable

Conditions to avoid: Do not mix with strong acids.

Incompatibility: Strong acids, Mercury, dimethyl sulfate, gold, silver nitrate, silver oxide.

Hazardous Decomposition By-products: Ammonia

Conditions Contributing to Hazardous Polymerization: Will not polymerize.

Section VI - Health Hazard Data

ROUTES OF EXPOSURE

Inhalation: Vapors are extremely irritating and upon prolonged contact can cause burning of tissues.

Skin Contact: May cause irritation or burning of tissues. Eye Contact: May cause severe tissue damage.

Ingestion: Can cause severe burning of tissues throughout the digestive system.

Signs and Symptoms of Exposure: Burning and irritation in all areas of exposure.

Medical Conditions Generally Aggravated by Exposure: Respiratory conditions.

EMERGENCY FIRST AID PROCEDURES

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. If difficult breathing persists seek medical attention.

Skin Contact: Wash with plenty of water for at least 15 minutes. If irritation persists seek medical attention. Eye Contact: Wash immediately with plenty of cool water being sure to wash under the eye lid for at least 15 minutes. Seek immediate medical attention.

Ingestion: DO NOT induce vomiting. Dilute product be giving large quantities of water or milk, followed by dilute vinegar or fruit juice to accomplish neutralization. Seek immediate medical attention.

Section VII - Precautions for Safe Handling

Spills or Releases: Flush spills with copious quantities of water. Follow by neutralizing with dilute acetic acid (vinegar), and rinse.

Waste Disposal Methods: Dispose of in accordance with local, state and federal regulations.

Clean Water Act Requirement: N/A

Resource Conservation and Recovery Act Requirements: $\ensuremath{\text{N/A}}$

Precautions for Handling and Storage: Avoid skin contact and excessive breathing of vapors.

Section VIII - Control Measures

Ventilation Requirements: Maintain adequate ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Ammonia respirator should vapors exceed 25 ppm.

Eyes: Chemical Goggles

Gloves: Plastic or rubber-coated.

Other Clothing and Equipment: Safety shoes and long sleeve shirt and long pants.

Section IX - Special Precautions

None

*HAZARD Rating Scale: 4 = Extreme 3 = High 2 = Moderate 1 = Slight 0 = Insignificant

The information herein is presented in good faith and believed to be correct as of the date hereof. However, Diamond Products, Inc., makes no representation as to the completeness and accuracy thereof. Users must make their own determination as to the suitability of the product for their purposes prior to use. No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose or of any other nature with respect to the product or the information herein is made hereunder. Diamond Products, Inc., shall in no event be responsible for any damages of whatsoever nature directly or indirectly resulting from the publication or use of or reliance upon information contained herein.