MATERIAL SAFETY DATA SHEET

PRODUCT CODE: 60-1585

SECTION I - MANUFACTURER IDENTIFICATION

EMERGENCY PHONE : 330-733-8834 DATE PRINTED : 11/15/02
INFORMATION PHONE : 330-733-8834

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

<table>
<thead>
<tr>
<th>REPORTABLE COMPONENTS</th>
<th>CAS NUMBER</th>
<th>VAPOR PRESSURE</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMMONIUM HYDROXIDE (AMMONIA)</td>
<td>7664-41-7</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

No toxic chemical(s) subject to the reporting requirements of section 313 of Title 31 and of 40 CFR 372 are present. ***

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING RANGE: 212 deg F
VAPOR DENSITY: UNKNOWN
COATING V.O.C.: 0.04 lb/gl
SOLUBILITY IN WATER: MISCELABLE

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: n/a
FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: n/a - UPPER: n/a

SECTION V - REACTIVITY DATA

STABILITY: STABLE
CONDITIONS TO AVOID
DO NOT FROST COMPOUND WILL COAGULATE

INCOMPATIBILITY (MATERIALS TO AVOID)
WATER SENSITIVE MATERIALS SUCH AS SULFURIC ACID

HAZARDOUS DECOMPOSITION OR BYPRODUCTS
CARBON MONOXIDE, CARBON DIOXIDE, OTHERS POSSIBLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VI - HEALTH HAZARD DATA

EMERGENCY PHONE : 330-733-8834
INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
Prolonged inhalation may cause lung irritation. May cause allergic reaction.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE
Liquid may cause eye irritation. Prolonged or repeated skin contact may cause skin irritation. May cause allergic reaction.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
Skin contact may cause skin irritation.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
N/A

HEALTH HAZARDS (ACUTE AND CHRONIC)
Liquid may cause eye irritation. Prolonged or repeated skin contact may cause skin irritation. Prolonged inhalation may cause lung irritation. May cause allergic reaction.

CARCINOGENICITY: NTP Carcinogen: No  IARC Monographs: No  OSHA Regulated: No  N/A

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE
Skin or eye disorders, lung disorders possible

EMERGENCY AND FIRST AID PROCEDURES
Eye - flush with water. Skin - wash with soap and water. Inhalation - remove to fresh air. Ingestion - seek medical attention.

----------------- SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE -----------------

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Stop leak to limit spreading. mop up or absorb with inert material. If small spill allow to dry and peel from floor.

WASTE DISPOSAL METHOD
Incinerate or landfill in accordance with federal, state and local laws and regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Do not freeze, keep containers covered, avoid eye contact, avoid prolonged or repeated skin contact.

OTHER PRECAUTIONS
Do not dump in sewer.

----------------- SECTION VIII - CONTROL MEASURES -----------------

RESPIRATORY PROTECTION
Normally nothing, NIOSH approved respirator if vapor concentrations are above TLV.

VENTILATION
To keep vapor concentrations below TLV.

PROTECTIVE GLOVES
Impermeable

EYE PROTECTION
Goggles if splashes occur.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT
N/A

WORK/HYGIENIC PRACTICES
General cleanliness should be observed.
"The data, statements and recommendations (shown for information only) are based on tests which are believed to be reliable. Since we have no control over the end use of our products we cannot guarantee the end results. We suggest the user determine whether the product is suitable for his own production conditions."