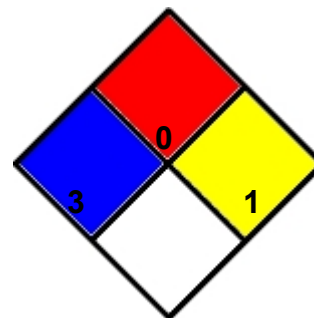


# MATERIAL SAFETY DATA SHEET

## NM-1134

### COMPANY IDENTIFICATION

**MANUFACTURER:** Chem-Tech  
400 Ternes Dr.  
Random Lake, WI 53075



**INFORMATION PHONE:** 920-994-2299  
**EMERGENCY:** 1-800-255-3924  
**HMS HEALTH:** 3    **FLAMMABILITY:** 0    **REACTIVITY:** 1    **PROTECTIVE:** G

### SECTION I - PRODUCT IDENTIFICATION

**PRODUCT:** NM-1134

**PREPARED BY:** Jason Sprang

**DATE PREPARED:** 2/28/2003

**LAST REVISION:** 9/1/2010

**HAZARD CLASS:** 8

**UN:** 2672

**PACKING:** III

**GUIDE NUMBER:** 154

**SHIPPING:** Ammonia solutions

### SECTION II - HAZARDOUS INGREDIENTS

<u>Chemical Name</u>	<u>%</u>	<u>CAS #</u>	<u>OSHA PEL</u>	<u>NIOSH</u>
AMMONIUM HYDROXIDE	10	1336-21-6	50 PPM	25 PPM

### SECTION III - PHYSICAL CHARACTERISTICS

**BOILING POINT:** 212°F

**SPECIFIC GRAVITY:** .99

**VAPOR PRESSURE:** N/A

**MELTING POINT:** N/A

**EVAPORATION:** N/A

**VAPOR DENSITY:** N/A

**pH:** 12

**SOLUABILITY IN WATER:** Soluble

**APPEARANCE AND ODOR:** Colorless liquid with strong pungent odor.

### SECTION IV - FIRE/EXPLOSION

**FLASH POINT:** > 200°F

**LEL:** 15 %

**UEL:** 28 %

**EXTINGUISHING MEDIA:** Use media which is safe for surrounding fire.

**SPECIAL FIRE FIGHTING:** Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece in positive pressure mode. Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

### SECTION V - REACTIVITY DATA

**STABLE:** Stable

**INCOMPATIBILITY:** The concentrate material forms explosive mixtures with oxygen, chlorine, iodine, mercury, silver, bromine and hypochlorite. DO NOT use aluminum, galvanized or tin-plated containers. DO NOT use unlined steel containers. Avoid storage with oxidizers and strong acids.

**HAZARDOUS DECOMPOSITION OR BY PRODUCTS:** Heating may cause expansion or decomposition leading to violent rupture of containers. Decomposes on heating and produces toxic fumes of ammonia. In an intense fire, gives off flammable vapor. May form an explosive mixture with air. Moderate explosion hazard when exposed to flame or involved in fire. Combustion products include nitrogen oxides (NO<sub>x</sub>).

**HAZARDOUS POLYMERIZATION:** Will Not Occur

## SECTION VI - HEALTH HAZARD DATA

### ACUTE HEALTH EFFECTS

**EYE CONTACT:** Corrosive to the eyes and may cause severe damage including blindness.

**INHALATION:** Corrosive to the nose, throat, and respiratory tract.

**INGESTION:** Corrosive and may cause severe and permanent damage to mouth, throat, and stomach.

**SKIN CONTACT:** Substance is corrosive. Cause severe skin burns.

**SIGNS AND SYMPTOMS OF EXPOSURE:** Shortness of breathing, confused behavior, redness of skin, swelling of tissues, watery eyes, nausea.

**AGGRAVATED MEDICAL CONDITIONS:** N/A

**SUPPLEMENTAL HEALTH INFORMATION:** The highly irritant properties of ammonia vapor result as the gas dissolves in mucous fluids and forms irritant, even corrosive solutions.

### EMERGENCY FIRST AID PROCEDURES

**EYE CONTACT:** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and tested by medical personnel.

**INHALATION:** Remove to fresh air. Monitor patient and call emergency personnel if necessary.

**INGESTION:** If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

**SKIN CONTACT:** Wash with soap and water. Get medical attention if irritation develops or persists.

## SECTION VII - SPILL OR LEAK PROCEDURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:** Ventilate area of leak or spill. Clean-up personnel require protective clothing and respiratory protection from vapors. Only specially trained or qualified personnel should handle the emergency.

**WASTE DISPOSAL METHOD:** The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Follow all MSDS/label precautions even after container is emptied because they may retain product residues.

## SECTION VIII - CONTROL MEASURES

**RESPIRATORY PROTECTION:** A NIOSH approved full-face respirator with a multi gas cartridge is required when using this product.

**VENTILATION:** Provide exhaust ventilation sufficient to keep the airborne concentration of this product below its exposure limits.

**PROTECTIVE GLOVES:** Nitrile gloves are required. Check manufacturer's limitations before using.

**EYE PROTECTION:** Use unventilated goggles with this product if you are not using a full-face respirator.

**OTHER PROTECTIVE CLOTHING:** Where splashing is possible, full chemically resistant protective clothing (e.g., acid suit) and boots are required.

**WORK / HYGENIC:** Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet.