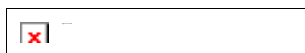


Product Number: **30501**Product Name: **Ammonium hydroxide solution**

Valid 05/2003 - 07/2003

Riedel-de Haen
3050 Spruce St.
St. Louis, MO 63178 USA
Tel: 314-289-6000

[Description / Pricing](#)[Cert. of Analysis](#)[MSDS](#)[Print Preview](#)[Bulk Quote](#)[Ask A Scientist](#)

M A T E R I A L S A F E T Y D A T A S H E E T

SECTION 1. - - - - - CHEMICAL IDENTIFICATION- - - - -
 CATALOG #: 30501
 NAME: AMMONIA SOLUTION ABOUT 25% NH3
 R.G. REAGENT

SECTION 2. - - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -
 CAS #: 1336-21-6
 EC NO: 215-647-6

SECTION 3. - - - - - HAZARDS IDENTIFICATION - - - - -
 LABEL PRECAUTIONARY STATEMENTS
 CORROSIVE
 DANGEROUS FOR THE ENVIRONMENT
 HARMFUL IF SWALLOWED.
 CAUSES BURNS.
 VERY TOXIC TO AQUATIC ORGANISMS.
 LACHRYMATOR.
 IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
 WATER AND SEEK MEDICAL ADVICE.
 WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE
 PROTECTION.
 IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE
 IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).
 AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS/
 SAFETY DATA SHEETS.

SECTION 4. - - - - - FIRST-AID MEASURES- - - - -
 IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
 CALL A PHYSICIAN.
 DO NOT INDUCE VOMITING.
 IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
 RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
 IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER
 FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND
 SHOES. CALL A PHYSICIAN.
 IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER
 FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING
 THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.

SECTION 5. - - - - - FIRE FIGHTING MEASURES - - - - -
 EXTINGUISHING MEDIA
 CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.
 SPECIAL FIREFIGHTING PROCEDURES
 WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
 PREVENT CONTACT WITH SKIN AND EYES.
 UNUSUAL FIRE AND EXPLOSIONS HAZARDS
 EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES- - - - -
 WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY
 RUBBER GLOVES.
 COVER WITH DRY LIME OR SODA ASH, PICK UP, KEEP IN A CLOSED CONTAINER
 AND HOLD FOR WASTE DISPOSAL.
 VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.
 EVACUATE AREA.

SECTION 7. - - - - - HANDLING AND STORAGE- - - - -
 REFER TO SECTION 8.

SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -
 SAFETY SHOWER AND EYE BATH.
 USE ONLY IN A CHEMICAL FUME HOOD.
 WASH CONTAMINATED CLOTHING BEFORE REUSE.
 DISCARD CONTAMINATED SHOES.
 WASH THOROUGHLY AFTER HANDLING.
 DO NOT BREATHE VAPOR.
 DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
 AVOID PROLONGED OR REPEATED EXPOSURE

AVOID PROLONGED OR REPEATED EXPOSURE.
 NIOSH/MSHA-APPROVED RESPIRATOR.
 COMPATIBLE CHEMICAL-RESISTANT GLOVES.
 CHEMICAL SAFETY GOGGLES.
 FACESHIELD (8-INCH MINIMUM).
 KEEP TIGHTLY CLOSED.
 STORE IN A COOL DRY PLACE.

SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -
 PHYSICAL PROPERTIES
 MELTING POINT: -77 C
 EXPLOSION LIMITS IN AIR:
 UPPER 27 %
 LOWER 16 %
 VAPOR PRESSURE: 115 MMHG @ 20 C
 SPECIFIC GRAVITY: 0.99
 VAPOR DENSITY: 1.2 G/L
 SWISS POISON CLASS: 4

SECTION 10. - - - - - -STABILITY AND REACTIVITY - - - - -
 STABILITY
 STABLE.
 INCOMPATIBILITIES
 COPPER, COPPER ALLOYS
 GALVANIZED IRON
 ZINC
 HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
 NITROGEN OXIDES
 AMMONIA
 HAZARDOUS POLYMERIZATION
 WILL NOT OCCUR.

SECTION 11. - - - - - TOXICOLOGICAL INFORMATION - - - - -
 ACUTE EFFECTS
 MATERIAL IS EXTREMELY DESTRUCTIVE TO TISSUE OF THE MUCOUS MEMBRANES
 AND UPPER RESPIRATORY TRACT, EYES AND SKIN.
 INHALATION MAY RESULT IN SPASM, INFLAMMATION AND EDEMA OF THE
 LARYNX AND BRONCHI, CHEMICAL PNEUMONITIS AND PULMONARY EDEMA.
 SYMPTOMS OF EXPOSURE MAY INCLUDE BURNING SENSATION, COUGHING,
 WHEEZING, LARYNGITIS, SHORTNESS OF BREATH, HEADACHE, NAUSEA AND
 VOMITING.
 CAUSES BURNS.
 MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.
 LACHRYMATOR.
 MAY BE HARMFUL IF INHALED.
 MATERIAL IS EXTREMELY DESTRUCTIVE TO THE TISSUE OF THE MUCOUS MEMBRANES
 AND UPPER RESPIRATORY TRACT.
 HARMFUL IF SWALLOWED.
 RTECS #: BQ9625800

SECTION 12. - - - - - ECOLOGICAL INFORMATION - - - - -
 DATA NOT YET AVAILABLE.

SECTION 13. - - - - - DISPOSAL CONSIDERATIONS - - - - -
 CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF
 THIS MATERIAL.
 DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A
 CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.
 OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. - - - - - TRANSPORT INFORMATION - - - - -
 CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. - - - - - REGULATORY INFORMATION - - - - -
 EUROPEAN INFORMATION
 EC INDEX NO: 007-001-01-2
 CORROSIVE
 DANGEROUS FOR THE ENVIRONMENT
 R 34
 CAUSES BURNS.
 R 50
 VERY TOXIC TO AQUATIC ORGANISMS.
 S 36/37/39
 WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE
 PROTECTION.
 S 61
 AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS/
 SAFETY DATA SHEETS.

SECTION 16. - - - - - OTHER INFORMATION- - - - -
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