

BioRem-2000™

Wastewater Solutions

Water Treatment™ NH3

- A powerful blend of microbes and natural botanical blends designed to remove ammonia.
- Reduces BOD, COD and TSS levels in waste water operations up to 90%.
- Reduces odor in waste water facilities, lift stations, holding ponds and landfill applications from 85% to 100% .
- Significantly reduces the ammonia levels in a minimal amount of time.
- Reduces sludge and odor.
- Effluent quality is improved.
- Resistant to many chemical shocks and decreases recovery time.

Ammonia is toxic to aquatic life and can place a direct demand on oxygen in certain surface waters or can lead to the excessive growth of aquatic algae. Ammonia, a form of nitrogen, is a common component of wastewater, resulting from the biological decomposition of organic matter. Ammonia can be toxic to aquatic life when it is discharged into small receiving streams with low dilution. To meet a federal ammonia removal requirement, the degree of treatment must increase substantially. Ferric chloride and aluminum sulfate products are considered hazardous and used to eliminate ammonia and to starve the microbes of needed nutrients which kill the microbes population. BioRem-2000 Water Treatment™ NH3 reacts with the ammonia and absorbs it on to non-soluble amino acids and is mixed into the sludge by precipitation. The ammonia is non-leachable, non-hazardous and non-releasable.

Specifications

Number of Different Microbial Strains	12
Microbial Count	50 Billion/gramm
Microbial Characteristic	All GRAS Listed
Number of Enzyme Species	7
Enzyme Activity	6,000 u/mg.
pH Activity Range	5-11 pH
Appearance	Amber Liquid
Bioluminescence Test	Positive for Living Cells
Salmonella	Negative
Listeria	Negative
Phosphorous	Non-Detect

Item Number	Product	Unit Size
8605-030	BioRem-2000 Water Treatment NH3™	30 Gal.
8605-055	BioRem-2000 Water Treatment NH3™	55 Gal.

Bioremediation, Inc
P.O. Box 6129
South Bend, IN 46617
888-242-2898

Water Treatment NH3™

Material Safety Data Sheet

BIOREMEDIATION INC.
CORPORATE: 888-242-2898
P.O. Box 6129
SOUTH BEND IN ,46617

CHEMTREC: 800-424-9300
HAZARD RATING

- 1= Slight
- 2= Moderate
- 3= High
- 4= Extreme
- 0= Insignificant

DATE PREPARED: 6/8/04
DATE REVISED: 6/8/04
DATE OF ORIGINATION: 11/12/98

HEALTH	1
FIRE	0
REACTIVITY	0
P.P.E	B

I. PRODUCT IDENTIFICATION:

Water Treatment NH3™

COMMON NAME: CLEANING COMPOUND
GENERIC NAME: CLEANER
CHEMICAL: MIXTURE

II. HAZARDOUS INGREDIENTS:

Ingredients	CAS	%	OSHA PEL	ACGIH TLV
DOES NOT CONTAIN ANY HAZARDOUS INGREDIENTS				

III. PHYSICAL/CHEMICAL CHARACTERISTICS:

BOILING POINT: 212 APPEARANCE: AMBER
SPECIFIC GRAVITY: 1.0031 FORM: LIQUID
MELTING POINT: N/D ODOR: BLAND
EVAPORATION RATE: N/D VAPOR DENSITY: N/D
SOLUBILITY (H2O, 25C): Soluble pH: 7
VOLATIZES CONTENT: 0 VOC (g/L) 0

IV. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: DEGREES More than 300F
LEL: N/D
UEL: N/D
Autoignition Temperature: N/D
Extinguishing Media: Product is water-based and will not support flames.
Unusual Fire/Explosion Hazards: Closed containers exposed to heat may rupture due to pressure buildup.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides, hydrocarbons, steam.

V. REACTIVITY:

Stability: Stable
CONDITIONS TO AVOID: None known

VI. HEALTH HAZARDS:

ROUTES AND INDICATIONS OF EXPOSURE

EYES: May cause irritation to eyes.
SKIN: Good industrial hygiene recommended.
INHALATION: N/A
INGESTION: May cause irritation.
TOXICITY DATA: None as listed by OSHA, NTP, IARC or EPA

EMERGENCY FIRST AID:

EYES: Flush eyes for fifteen minutes with water.
SKIN: Wash exposed areas with soap and water.
INHALATION: Remove victim to fresh air or oxygen supply. Seek medical attention if breathing difficulty persists.
INGESTION: If conscious, give victim two glasses of water to dilute ingested material. Do not induce vomiting.

VII. SPILL, DISPOSAL PROCEDURES AND PRECAUTIONS:

HANDLING: Keep closed when not in use. Store at room temperature. Prevent product from freezing. Follow MSDS and Label warnings even after package is empty.
Material Spillage: Contain, retrieve spilled materials (absorb, pump, vacuum)
WASTE DISPOSAL: This material is NOT defined as hazardous by the Resource Conservation and Recovery Act. It is the product users responsibility to determine at the time of disposal, whether a material containing the product or derived form the product should be classified as a hazardous waste. (40 FR 261020-40). Spill and releases of this material are not reportable under S.A.R.A. (III) Sec. 313.

VIII. PERSONAL PROTECTIVE EQUIPMENT (P.P.E.):

PROTECTIVE EQUIPMENT: Wear safety glasses and gloves.
RESPIRATORY PROTECTION: General ventilation recommended.
ENGINEERING CONTROLS: Keep containers closed when not in use. Do not handle or store near strong oxidants.
PERSONAL HYGIENE: Cleanse skin thoroughly after contact.

IX. REGULATORY INFORMATION:

D.O.T. SHIPPING NAME: NON-REGULATED
D.O.T. HAZARD CLASSIFICATION: N/A
S.A.R.A. III Sec. 311 & 312: N/A
S.A.R.A. III Sec. 313: NOT covered under Sara 313
R.C.R.A.: NO
TSCA Registry: YES

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