

# BioRem-2000™ Wastewater Solutions

## Water Treatment™ Sludge

- A powerful blend of microbes and natural botanical blends designed to reduce sludge and improve odor control.
- Reduces BOD, COD and TSS levels in waste water operations up to 90%.
- Reduces sludge volume in digesters (aerobic/anaerobic), clarifies and lagoons up to 50% .
- Reduces odor in waste water facilities, lift stations, holding ponds and landfill applications from 85% to 100%.
- Effluent quality is improved.
- Resistant to many chemical shocks and decreases recovery time.
- Improves biological, sludge and nitrification/denitrification processes.



Biological treatment of wastewater is used primarily to remove the biodegradable organic substances (colloidal or dissolved). Bacteria is the primary microorganism used in the removal of carbonaceous BOD and the stabilization of organic matter when biological treatment is employed. A variety of biological processes have evolved over the past 30 years to deal with varying wastewater characteristics and increased control of discharges. BioRem-2000 Water Treatment™ Sludge is very effective in converting and decomposing organic matter at a high rate. Dramatic changes in ratio of food to microorganisms (F/M) takes place as well and assist in predicting improved process efficiency.

Variances in wastewater temperatures and pH have a wider operating range with BioRem-2000 Water Treatment™ Sludge than with conventional biological parameters. This capability allows for more consistent activity with uniform feed rates.

## Specifications

Chemical Make Up	All natural microbial, botanical mixture	Brix Percent	0.15%
Number of enzyme species	7	Color	Brown
Enzyme Concentration	5% by weight	Bioluminescence Test	Positive
Enzyme Activity	6,000 u/mg.	Phosphorous	Non-Detect
Microbial Count	50 billion/gram	Nitrogen (as ammonia)	<5 PPM
Microbial Characteristic	All GRAS Listed	Glucose Analysis	<Negative
Microbial Strains	12	Protein Analysis	>2000 mg/dL
pH Range	>10.5	pH Activity Range	5-11 pH

Item Number	Product	Unit Size
8601-030	BioRem-2000 Water Treatment Sludge™	30 Gal.
8601-055	BioRem-2000 Water Treatment Sludge™	55 Gal.

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

# Water Treatment Sludge™

## 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 Sludge™**  
COMMON NAME: CLEANING COMPOUND  
GENERIC NAME: CLEANER  
CHEMICAL: MIXTURE

### II. HAZARDOUS INGREDIENTS:

Ingredients	CAS	%	OSHA PEL	ACGIH TLV
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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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