

PHOENIX PRODUCTS
171 RIVER STREET
THOMASTON, CT 06787
(860) 283-4923

PRODUCT CODE # 4013-4014/8
PRODUCT NAME: BIQUANIDE

MATERIAL
SAFETY DATA
SHEET
7/1/98

SECTION I - IDENTIFICATION

CHEMICAL NAME & SYNONYMS: Poly (Hexamethylene Biguanide Hydrochloride)
20 % water solution - PHMB

TRADE NAME: Biquanide Swimming Pool Sanitizer and Aligistat

DESCRIPTION: Light blue liquid with a slight odor.

CAS NO. 32289-58-0

SECTION II - PHYSICAL DATA

Boiling Point: 208°F

Evaporation Rate: N/A

pH: 4.5 - 6.0

Freezing Point: 43°F

Specific Gravity (H₂O=1): 1.04

Solubility in water: Completely

SECTION III - HAZARDOUS INGREDIENTS

MATERIAL	CAS NO.	% BY WEIGHT	HAZARD DATA
PHBM	—	20%	Irritant by prolonged contact with eyes or skin.
Hydrochloric Acid	7847-01	0.2%	None

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: N/A

Autoignition Temp: N/A

Flammable Limits in Air % By Volume: N/A

Extinguishing Media: Water fog, carbon dioxide, dry chemical or foam.

Special Fire Fighting Procedures: None

Unusual Fire and Explosion Hazards: Non-flammable or explosive risks.

SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE:

Inhalation: None

Skin: Prolonged or repeated exposure may cause irritation.

Eye: Concentrated material induced severe irritation.

Ingestion: N/A

SECTION VI - EMERGENCY AND FIRST AID PROCEDURE

INHALATION: Remove person to fresh air. If cough or other respiratory symptoms develop, consult a physician.

SKIN: Remove contaminated clothing. Wash skin thoroughly with soap and water. If irritation persists, consult a physician.

EYE: Immediately flush with water for at least 15 minutes. Immediately consult a physician.

INGESTION: Give large amounts of water. DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician immediately.

SECTION VII - TOXICOLOGY

Oral LD50(rat): 2.5 - 2.7g/kg

Skin Absorption LD50: (rabbit) > 2ml/kg

Inhalation: Does not pose a vapor inhalation hazard.

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SECTION VIII - REACTIVITY DATA**Stability:** Stable**Conditions to Avoid:** Temperatures below 43°F**Incompatibility (materials to avoid):** Chlorine, Bromine, Ozone, Sodium Hydroxide, Copper, Silver, and most metals**Hazardous Decomposition:** Combustion products of dry material: carbon dioxide, carbon monoxide, nitrogen oxide, ammonia, halogen, halogen acids, possible trace of carbonyl halide.**Hazardous Polymerization:** Will not occur.

SECTION IX - SPILL, LEAKAGE & DISPOSAL PROCEDURES

Steps to take if material leaks or spills: **LARGE SPILLS:** Wear skin, eye and respiratory protection during cleanup. Dam area to prevent spread of spill. Absorb on a neutral support (sand, sawdust, etc..) and evacuate before washing spill with great quantity of water. **SMALL SPILLS:** Flush liquid with a great quantity of water.

Waste disposal method: This product is not a hazardous waste under RCRA 40 CFR 261. However, it is toxic to fish. Dispose of in accordance with all Federal, State and Local regulations.

SECTION X - SPECIAL PROTECTION DATA**Ventilation:** Local ventilation is adequate.**Eye Protection:** Wear safety glasses.**Respiratory Protection:** If needed, use MSHA NIOSH approved respiratory equipment with high efficiency filter combine with cartridge approved for ammonia and methylamine.**Protective Gloves:** Use gloves impervious to this material.**Other Equipment:** Wear long-sleeved, body-covering clothing.

SECTION XI - SPECIAL PRECAUTIONS DATA

Handling and Storage: Storage temperature should be above 43, other wise the product can become solid or precipitate. It is only limpid after a long time of warming, under sufficient stirring conditions.

Tank Bulk Storage: Polyethylene, Polypropylene, Vinyl Polychloride..... Unsuitable materials - Metallic materials (Copper, Iron, Zinc, Steels...) and some rubbers. Clean tank by washing with water.

Other: None.

The Phoenix Products Co.
171 River Street
Thomaston, CT 06787