SAFETY DATA SHEET
Puracil Chlorine Free Sanitizer - 0510

Product Name: Puracil Chlorine Free Sanitizer
Date: 5/19/2015

SECTION 1 *IDENTIFICATION*

Supplier: Phoenix Products Company
55 Container Drive
Terryville, CT 06786
(860) 589-7502

Distributor:

U.S. PERS Emergency Telephone: 1-800-633-8253
Product Name: **Puracil Chlorine Free Sanitizer**
Synonyms: Poly(iminocarbonimidoyliminocarbonimidoylimino-1,6-hexanediyl); Poly(hexamethylenebiguanide)hydrochloride; Acticide SR 1296
Chemical Name: PHMB
Chemical Formula: $C_{18}H_{41}ClN_{10}$
CAS Number: 32289-58-0

SECTION 2 *COMPOSITION/INFORMATION ON INGREDIENTS*

Emergency Overview
Danger
Corrosive

Physical Hazards

Corrosive to metals	Category 1

Health Hazards

Acute toxicity, oral	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Specific Target Organ Toxicity Exposure, Single	Category 3 respiratory tract irritation

Hazard Statement(s)

H290: May be corrosive to metals
H302: Harmful if swallowed
H314: Causes severe skin burns and eye damage
H335: May cause respiratory irritation
H333: May be harmful if inhaled

Precautionary Statements

P234: Keep only in original container.
P262: Do not get in eyes, on skin, or on clothing.
P264: Wash thoroughly with soap and water after handling.
P260: Do not breathe mist or vapours.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P321: Specific treatment (see First Aid Measures on this label).
P310: Immediately call a POISON CENTER or doctor.
P362+364: Take off contaminated clothing and wash it before reuse.
P390: Absorb spillage to prevent material damage.
P403+233: Store in a well ventilated place. Keep container tightly closed.
P405: Store locked up.

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 3 *HAZARDOUS COMPONENTS*

Component	CAS Number	Percent
PHMB	32289-58-0	20%

SECTION 4 *FIRST-AID MEASURES*

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately.

Skin Contact: Take off immediately all contaminated clothing. Wash off IMMEDIATELY with plenty of water for at least 15-20 minutes. Get medical attention IMMEDIATELY. Call a physician or poison control center immediately.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed: Contact with this material will cause burns to the skin, eyes and mucous membranes.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wash contaminated clothing before reuse.

SECTION 5 *FIRE FIGHTING MEASURES*

Suitable Extinguishing Media: Dry chemical. Foam. Carbon dioxide (CO2).

Unsuitable Extinguishing Media: Water. Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Firefighting equipment/instructions: In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

SECTION 6 *ACCIDENTAL RELEASE MEASURES*

Personal precautions, protective equipment and emergency procedures: Immediately evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up: Should not be released into the environment. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Deactivation materials include lime, limestone, sodium carbonate (soda ash), sodium bicarbonate, and dilute sodium hydroxide. Prevent entry into waterways, sewer, basements or confined areas.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. For waste disposal, see Section 13 of the SDS.

Environmental Precautions: Avoid discharge into drains, water courses or onto the ground.

SECTION 7 *HANDLING AND STORAGE*

Precautions for Safe Handling: Wear appropriate personal protective equipment. Do not get in eyes, on skin, on clothing. Do not breathe mist or vapor. Observe good industrial hygiene practices. Do not empty into drains. Use caution when combining with water; DO NOT add water to acid, ALWAYS add acid to water while stirring to prevent release of heat, steam and fumes.

Conditions for safe storage, including any incompatibilities: Store in a well-ventilated place. Store away from incompatible materials. Store in containers specially designed for this product and strength. Keep away from heat, sparks and open flame.

SECTION 8 *EXPOSURE CONTROL/PERSONAL PROTECTION*

Control Parameters

Components With Critical Values That Require Monitoring At The Workspace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Exposure Limits: No occupational exposure limit assigned.

Biological Limit Values: No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

SECTION 8 *EXPOSURE CONTROL/PERSONAL PROTECTION - Continued*

Individual protection measures, such as personal protective equipment

Eye/Face Protection: Wear safety glasses with side shields (or goggles). Face-shield. Wear a full-face respirator, if needed.

Skin Protection

Hand Protection: Chemical resistant gloves.
Other: Wear appropriate chemical resistant clothing.

Respiratory Protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

Thermal Hazards: Wear appropriate thermal protective clothing, when necessary.

General Hygiene Considerations: Do not get this material on clothing. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9 *PHYSICAL AND CHEMICAL PROPERTIES*

Appearance:	Light blue liquid
Odor:	Slight Odor
pH:	4.0 – 6.0
Melting Point:	Not determined
Boiling Point:	208˚F
Flash Point:	Not applicable
Ignition Temperature:	Product is not self-igniting
Flammability:	
Lower Explosion Limit:	Product is not explosive
Upper Explosion Limit:	Product is not explosive
Vapor Pressure @ 20°C:	23 hPa
Density @ 20°C:	1.030 – 1.060
Specific Gravity (H_2O=1):	1.04
% Volatile by Volume:	Near 100%
Solubility/Miscibility In Water:	Fully miscible
Partition Coefficient (n-octanol/water):	Not available

SECTION 10 *STABILITY AND REACTIVITY*

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical Stability: Material is stable under normal conditions.
Possibility of Hazardous Reactions: Hazardous polymerization does not occur.

Conditions to Avoid: Contact with metal may release flammable hydrogen gas. Contact with incompatible materials. Do not mix with other chemicals.

Incompatible Materials: Incompatible with bases. Amines. Acid anhydrides. Metals. Organic compounds. Sulfides.

Hazardous Decomposition Products: Hydrogen chloride gas.

SECTION 11 *TOXICOLOGICAL INFORMATION*

Information on likely routes of exposure

Inhalation: Vapors and mist will irritate throat and respiratory system and cause coughing.
Skin Contact: Causes skin burns.
Eye Contact: Causes eye burns.
Ingestion: Harmful if swallowed. Causes digestive tract burns. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.

Symptoms related to the physical, chemical and toxicological characteristics: Contact with this material will cause burns to the skin, eyes and mucous membranes. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute Toxicity: Harmful if swallowed.

Test (Acute)	Species	Test Results
Inhalation – LC50	Rat	3124 mg/l, 1 Hours
Oral – LD50	Rabbit	900 mg/kg

Skin Corrosion/Irritation: Causes severe skin burns and eye damage.
Serious eye damage/eye irritation: Causes serious eye damage.

Respiratory or Skin Sensitization

Respiratory Sensitization: Not available.
Skin Sensitization: No data available.

Germ Cell Mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity
Hydrochloric acid (CAS 7647-01-0): 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Reproductive Toxicity: This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure: No data available.
Aspiration Hazard: Not available.
Chronic Effects: Prolonged inhalation may be harmful.

SECTION 12 *ECOLOGICAL INFORMATION*

Method	Dose	H	Species
LC50	862 mg/l	96	Leuciscus idus
LC50	282 mg/l	96	Western mosquitofish (Gambusia affinis)

Ecotoxicity: Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

Persistence and degradability: No data is available on the degradability of this product.
Bioaccumulative potential: No data available.
Mobility in soil: No data available.
Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13 *DISPOSAL CONSIDERATIONS*

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations: Dispose in accordance with all applicable regulations.

Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues/unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated Packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

SECTION 14 *TRANSPORT INFORMATION*

DOT:
UN Number: ORM-D
UN Proper Shipping Name: ORM-D
Transport Hazard Class: ORM-D
Packing Group: ORM-D

Consumer commodity (ORM-D) means a material that is packaged and distributed in a form intended or suitable for sale through retail sales agencies or instrumentalities for consumption by individuals for purposes of personal care or household use. Valid until December 31, 2020.

TDG:
UN Number: 3082
UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Poly(hexamethylenebiguanide Hydrochloride))
Transport Hazard Class: 9
Packing Group: III

MEX:
UN Number: 3082
UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Poly(hexamethylenebiguanide Hydrochloride))
Transport Hazard Class: 9

	Packing Group:	III
IMDG:	**UN Number:**	3082
	UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Poly(hexamethylenebiguanide Hydrochloride))
	Transport Hazard Class:	9
	Packing Group:	III
	EMS-No:	F-A, S-F
IATA:	**UN Number:**	3082
	UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Poly(hexamethylenebiguanide Hydrochloride))
	Transport Hazard Class:	9
	Packing Group:	III

SECTION 15 ***REGULATORY INFORMATION***

OSHA Hazards: This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

SARA 311/312 Hazards: Acute Health Hazard

The components of this product are reported in the following inventories:

TSCA	Note: Listed

Designation According To Ec Guidelines: The product has been classified and labeled in accordance to EC Directives / Ordinance on Hazardous Materials (CHIP)

Labeling Hazard Symbols: Xi: Irritant
N: Dangerous for the environment

Risk Phrases: R41: Risk of serious damage to eyes.
R50: Very toxic to aquatic organisms.

Safety Phrases: S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39: Wear suitable gloves, and eye/face protection.
S60: This material and its container must be disposed of as hazardous waste.
S61: Avoid release to the environment. Refer to special instruction/safety data sheets.

Designation And Concentration Of Biocidal Ingredients According To Ec Directive 98/8/Ec: Polyaminopropyl-biguanide (INCI): 200.0 g/kg

Control Of Major Accident Hazards (Comah): Critical quantity values according to the regulations on accidents should be adhered to.

Water Hazard Class: WGK2 (Self VwVwS Ann.4)

SECTION 16 ***OTHER INFORMATION***

HMIS

Health	3
Flammability	0
Reactivity	0

No representations or warranties, either expressed or implied, of merchant ability, fitness for a particular purpose or any other nature are made hereunder with respect to information or the product to which the information refers.

Date: 5/19/2015
Phoenix Products Company