



MATERIAL SAFETY DATA SHEET

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Leisure Time Free

1. Product And Company Identification	
Supplier Leisure Time 1400 Bluegrass Lakes Parkway Alpharetta, GA 30004 United States Telephone Number: (770) 521-5999 FAX Number: (770) 521-5959 Web Site: www.poolspacare.com	Manufacturer Mareva, Inc. 1119 Cavalier Boulevard Chesapeake, VA 23323 Telephone Number: (757) 558-1000
Supplier Emergency Contacts & Phone Number CHEMTREC - DAY OR NIGHT: (800) 424-9300	Manufacturer Emergency Contacts & Phone Number None Given
Issue Date: 02/24/2005 Product Name: Leisure Time Free Chemical Name: PHMB EPA Registry Number: 69461-1 MSDS Number: 336	

2. Composition/Information On Ingredients			
Ingredient Name	CAS Number		Percent Of Total Weight
POLY(HEXAMETHYLENE BIGUANIDE HYDROCHLORIDE)	91403-50-8		
Ingredients listed in this section have been determined to be hazardous as defined in 29 CFR 1910.1200. Materials determined to be health hazards are listed if they comprise 1% or more of the composition. Materials identified as carcinogens are listed if they comprise 0.1% or more of the composition. Information on proprietary materials is available in 29CFR 1910.1200(i)(1).			

Hazards Identification (Pictograms)



3. Hazards Identification
Eye Hazards The concentrated material induced severe irritation in rabbit eye studies, but dilution of 5% or less were non-irritating.
Skin Hazards A 10% solution of the material induced skin sensitization in human patch tests. Dermatitis and allergic skin reactions can develop on human skin after repeated/prolonged contact with 10% solution or with higher concentration of this material. Relative to other materials, this product is practically non-toxic by skin penetration. Systematically concentrations are unlikely to be absorbed through the skin in man.
Ingestion Hazards Relative to other materials, a single dose of this product is slightly toxic by ingestion. Irritation of the mouth, pharynx, esophagus and stomach may develop following ingestion.
Inhalation Hazards This product does not pose a vapor inhalation hazard, but repeated and/or prolonged aerosol exposures are potentially hazardous. Rats exposed to 0.25 mg/m ³ as an aerosol for six hours per day, 5 days per week, for three weeks, developed methemoglobinemia, eye and respiratory irritation and pneumonia.

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3. Hazards Identification - Continued

Inhalation Hazards - Continued

No adverse respiratory effects were observed at 0.025 mg/m³ in air. The effects were more severe at higher concentrations. If aerosol exposure is limited and good industrial hygiene is practiced, the potential hazards associated with aerosol exposure will not be expressed.

The symptoms of methemoglobinemia includes cyanosis (blue-tinged skin), euphoria, headache, flushed face, light-headedness, ataxis, weakness, rapid heart beat, labored breathing, nausea, vomiting and mental confusion. Hypertension, blindness, liver and kidney injury can result after extreme exposure.

First Aid (Pictograms)



4. First Aid Measures

Eye

In case of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Consult Physician

Skin

In case of contact, immediately flush skin with soap and plenty of water. Get medical attention immediately if irritation (redness, itching, burning) develops.

Ingestion

DO NOT INDUCE VOMITING. Give one or two glasses of water to drink and refer victim to medical personnel. Never give anything by mouth to an unconscious victim.

Inhalation

If inhaled, remove to fresh air. If cough or other respiratory symptoms develop, consult medical personnel.

Fire Fighting (Pictograms)



5. Fire Fighting Measures

Flash Point: N/A °F

Flammability Class: N/A

Fire And Explosion Hazards

None known

Extinguishing Media

Use the appropriate extinguishing media for the surrounding fire.

Fire Fighting Instructions

Firefighters should wear self-contained breathing apparatus and full protective gear.

6. Accidental Release Measures

Wear skin, eye, and respiratory protection during cleanup. Contain spill and keep out of sewers and drains. Soak up liquid with absorbant and shovel into waste container. Cover container and remove from work area.

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Handling & Storage (Pictograms)



7. Handling And Storage

Handling And Storage Precautions

Prevent eye and skin contact. Avoid breathing aerosols. Normal chemical precautions should be taken in handling and storage of material. Do not generate aerosol unless can be fully contained such as in a closed system.

8. Exposure Controls/Personal Protection

Engineering Controls

Local exhaust acceptable. Special exhaust not required. No TLV assigned. Minimize exposure in accordance with good hygiene practice. Exposure to the aerosol should be reduced or eliminated.

Eye/Face Protection

Prevent eye contact. Wear chemical goggles.

Skin Protection

Prevent skin contact. Use impervious gloves. Depending upon conditions of use, additional protection may be required such as apron, arm covers, or full body suit.

Respiratory Protection

If needed, use NIOSH-approved respirator with high efficiency filter combined with cartridge approved for ammonia and high methylamine.

9. Physical And Chemical Properties

Appearance

blue liquid

Odor

mild

Chemical Type: Mixture

Physical State: Liquid

Boiling Point: 102 °C

Specific Gravity: 1.04

pH Factor: <5.0

Solubility: soluble in water

10. Stability And Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur.

Incompatible Materials

Copper, silver, sodium hydroxide, most metal.

Hazardous Decomposition Products

Combustion products of dry material: carbon dioxide, carbon monoxide, nitrogen oxide, ammonia, halogen, halogen acids, possible trace of carbonyl halide.

11. Toxicological Information

Eye Effects

The concentrated material induced severe irritation in rabbit eye studies, but dilution of 5% or less were non-irritating.

Skin Effects

This concentrated material induced moderate skin irritation in a 24-hour rabbit dermal irritation test. Dilution of 5% or less were not irritating on rat skin. The acute dermal LD 50 in rabbit is greater than 2 mg/kg in rabbits.

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11. Toxicological Information - Continued

Acute Oral Effects

The acute oral LD 50 in rat is 2.5 - 2.7 g/kg.

Acute Inhalation Effects

This product does not pose a vapor inhalation hazard, but repeated and/or prolonged aerosol exposures are potentially hazardous. Rats exposed to 0.25 mg/m³ as an aerosol for six hours per day, 5 days per week, for three weeks, developed methemoglobinemia, eye and respiratory irritation and pneumonia.

Conditions Aggravated By Overexposure

PHMB, the active ingredient in this product, when administered to mice at very high doses, induced an increased incidence of cancer in mice. Under the conditions of anticipated use of this product, PHMB does not represent a risk to man.

Ecological (Pictograms)



12. Ecological Information

Ecotoxicological Information

This product is toxic to fish.

13. Disposal Considerations

Discarded product is not a hazardous waste under RCRA, 40 CFR 261. This material is toxic to fish. Do not contaminate waterways by cleaning of equipment or by disposal of waste. To deactivate this material, adjust pH of solution to 6.8-7.0. Add 5% solution of sodium hypochlorite (household bleach), 5 parts sodium hypochlorite solution to one part product. Let stand for 48 hours. Dilute deactivated solution with plenty of water and discharge to a sewer serviced by a wastewater treatment facility.

Empty container retains product residue. Observe all hazards precautions. Do not distribute, make available, furnish, or reuse empty container except for storage and shipment of original product. Remove all product residue and puncture or otherwise destroy empty container before disposal.

RCRA Information

Discarded product is not a hazardous waste under RCRA, 40 CFR 261.

14. Transport Information

Proper Shipping Name

Not regulated

Hazard Class

Not regulated

DOT Identification Number

NONE

15. Regulatory Information

U.S. Regulatory Information

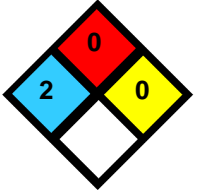
All ingredients are on the TSCA Chemical Substance Inventory. (Toxic Substances Control Act), Regulation, 40 CFR 710.

SARA Section 313 Notification

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313. (Regulation, 40 CFR 355, 370 and 372).

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NFPA	HMIS								
	<table border="1"><tr><td>HEALTH</td><td style="text-align: center;">2</td></tr><tr><td>FLAMMABILITY</td><td style="text-align: center;">0</td></tr><tr><td>REACTIVITY</td><td style="text-align: center;">0</td></tr><tr><td>PERSONAL PROTECTION</td><td style="text-align: center;">C</td></tr></table>	HEALTH	2	FLAMMABILITY	0	REACTIVITY	0	PERSONAL PROTECTION	C
HEALTH	2								
FLAMMABILITY	0								
REACTIVITY	0								
PERSONAL PROTECTION	C								

16. Other Information

Revision/Preparer Information

MSDS Preparer: JHW

Disclaimer

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