Gemstone Systems, Inc.

Clearwater Finish – Part B Component

Material Safety Data Sheet

Emergency Contact # - 800 535 5053

A. Trade Name – ClearWater Series Part B Catalyst

- **Chemical Name** – Polymeric Hexamethylene
- **Formula -** Polymeric Hexamethylene Disocyanate

DOT CLASS – NOT REGULATED
HMIS: H-2, F-0, R-1

B. First Aid Measures

- **Eyes -** If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist seek medical attention. For direct contact hold eyelids apart and flush with clean water for at least 15 minutes.
- **Skin -** Remove contaminated clothing and shoes and flush affected area with large amounts of water. If skin is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged cleanse thoroughly with mild soap and water. If redness or irritation develops seek medical attention.
- **Inhalation -** If respiratory symptoms or other symptoms of exposure develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek immediate medical attention. If victim is not breathing, immediately start artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel seek immediate medical attention.
- **Ingestion -** This material is a potential aspiration hazard. DO NOT INDUCE VOMITING. If swallowed seek emergency medical attention. If victim is drowsy or unconscious, place on left side with head down. If possible, do not leave the victim unattended.

C. Hazards Information

- **Fire and Explosion -**
  - Flash Point - > 375°f
  - Auto Ignition Temperature – N/A
- **Unusual Explosions and Fire Hazards -** Decomposition and combustion products may be toxic.

Health

- **Ingestion -** Ingestion of excessive amounts may cause irritation of the digestive tract and signs of nervous system depression. ASPIRATION HAZARD. This material can enter the lungs during swallowing or vomiting causing lung inflammation and damage.
- **Inhalation -** HDI vapors or mists at concentrations above the TLV can irritate the mucous membranes in the respiratory tract causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function. Persons with a preexisting, nonspecific bronchial hyperactivity can respond to concentrations below the TLV with symptoms as well as asthma attack. Exposure above the TLV may lead to bronchitis, bronchial spasm and pulmonary edema. These effects are usually reversible. -
- **Skin -** May cause skin sensitization, an allergic reaction, which becomes evident on re-exposure to this material.
- **Eyes -** This material may cause mild eye irritation. Direct contact with the liquid or exposure to vapors or mists may cause stinging, tearing and redness. Chronic eye contact may result in corneal opacity. Prolonged vapor contact may cause conjunctivitis.
- **Unusual Chronic Toxicity-** Repeated exposures or a single large dose, certain individuals may develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanine at levels below the TLV.

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D. Precaution/Procedures

- **Ventilation** –Good mechanical ventilation and local exhaust
- **Normal Handling -** Wash thoroughly after handling.
- **Storage -** Use and store this material in cool, dry, well ventilated areas away from heat and all sources of ignition. Keep containers closed when not in use. Store only in approved containers. Protect containers against physical damage.
- **Spill or Leak -** Absorb spill with an inert absorbent material, then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Wear a self contained breathing apparatus and appropriate personal protection.

- **Fire Extinguishing Precautions** – Wear full protective gear and NIOSH/MSHA approved self-contained Breathing apparatus.
- **Special Firefighting Procedures**: Wear appropriate protective equipment including respiratory protection as conditions warrant. Stop spill/release if it can be done without risk. Water spray may be useful in minimizing or dispersing vapors and cooling equipment exposed to heat and flames. Avoid spreading burning liquid with water used for cooling purposes.

E. Personal Protective Equipment

- **Respiratory Equipment -** A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying systems is limited. 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.
- **Skin -** Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.
- **Engineering Controls -** Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. Use explosion proof ventilation equipment. Facilities storing or utilizing this product should be equipped with an eyewash facility and a safety shower.
- **Hygienic Practices -** Wash hands before eating. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material.
- **Eyes -** Wear safety glasses with side shields (or goggles) and a face shield.

F. Physical Data

- **Description** - Polymeric Hexamethylene
- **Boiling Point** - N/A
- **Vapor density** - Is Heavier Than Air
- **Solubility in water** - Slight
- **Evaporation rate** - Is Slower Than Ether

Specific gravity – 1.05
Vapor pressure – N/A
Ph – N/A % Volatiles
(By Volume) - nil

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G. Reactivity Data

- **Conditions To Avoid:** AVOID CONTACT WITH WATER.
- **Stability -** This product is stable under normal storage conditions.
- **Incompatible Materials -** This product is incompatible with WATER, strong acids or bases, oxidizing agents and selected amines.
- **Hazardous Decomposition Products -** Combustion may yield carbon monoxide, carbon dioxide, nitrogen oxides and various hydrocarbons.
- **Hazardous Polymerization -** Will not occur under normal conditions.

H. Ingredients/Mixtures

Ingredient	Percentage	CAS #
Polymeric Hexamethylene Disocyanate	**>75%**	**28182-81-2**
Hexamethylene Diisocyanate	**<0.25%**	**822-06-0**

H. (Section II) Acute Toxicity Data

NO.	Acute Oral LD50	Acute Dermal LD50	Acute Inhalation LC50
A.	N/A		
B.	N/A		

H. (Section III) Exposure Limits

NO.	PEL/TWA	PEL/CEILING	SKIN	TLV/TWA	TLV/STEL
A.	0.5 mg/M3		YES	NE	NE
B.	.02 ppm		YES	.005 ppm	NE

I. Environmental

- **Biodegradability -** Not known
- **Waste Disposal Methods -** Dispose of product in accordance with local, county, state, and federal regulations

J. References

- **Permissible Concentration References – N/A**
- **Regulatory Standards – N/A**
- **General – N/A**

K. Transportation Information

DOT NON-REGULATED

Gemstone Systems, Inc. 10640-47th Street. N. - Clearwater, FL 33762 - **Phone**: 727-541-3194 - www.gemstoneinc.net

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L. State Regulatory Information

The following chemicals are specifically listed by individual States; other product specific health and safety data in other sections of the MSDS may also be applicable for State requirements. For details on your regulatory requirements you should contact the appropriate agencies in your State.

State Listed Component	Percent	State Code
N/A		
N/A		

*California proposition 65 footnote: the chemical identified is known to the state of California to cause cancer.

M. Additional Information

Empty Container Handling!

WARNING! Emptied container retains product residue and vapors.
observe all label precautions even after container is emptied.
do not cut, drill, grind, or weld on or near container.

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Environmental Data			
Section I		**Product/Composition**	
NO.	**Component**	**CAS No.**	**Percentage**
A.	**Polymeric Hexamethylene Disocyanate**	**28182-81-2**	**>75.0 %**
B.	**Hexamethylene diisocyanate**	**822-06-0**	**<0.25**

Section II **Sara Title III Information**

NO.	EHS RQ (LBS) (*1)	EHS TPQ (LBS) (*2)	SEC 313 (*3)	313 CATEGORY (*4)	311/312 CATEGORIES (*5)
A.					H-1

----------FOOTNOTES
*1 = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
*2 = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC. 302
*3 = TOXIC CHEMICAL, SEC. 313
*4 = CATEGORY AS REQUIRED BY SEC. 313 (40 CFR 372.65 C), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
*5 = HAZARD CATEGORY FOR SARA SEC. 313/312 REPORTING
HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONI HEALTH HAZARD
PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSUR HAZARD
P-5 = REACTIVE HAZARD

Section III **Environmental Release Information**

KEEP OUT OF SURFACE WATERS, SEWERS, AND WATERWAYS ENTERING OR LEADING T SURFACE WATERS. NOTIFY AUTHORITIES IF ANY EXPOSURE TO THE GENERAL PUBLIC O ENVIRONMENT OCCURS OR IS LIKELY TO OCCUR.

Section IV **RCRA Information**

IF THIS PRODUCT BECOMES A WASTE, IT WOULD NOT BE A WASTE BY RCRA CRITERIA (40 CFR 261) PLACE IN AN APPROPRIATE DISPOSAL FACILITY IN COMPLIANCE WITH