



CARBOPOL EZ-2
Safety Data Sheet
Product Code: 482
Revision Date: July 1, 2015



Protameen Chemicals Inc.
375 Minnisink Road
Totowa, NJ 07511
(973) 256-4374
(973) 256-6764 FAX
www.protameen.com

Section 1. Material and Manufacturer Identification

Distributor: Protameen Chemicals Inc.

Manufacturer: The Lubrizol Corporation
9921 Brecksville Rd.
Brecksville, OH 44141
(216) 447-5000
CHEMTREC 1-800-424-9300

Telephone:
Emergency Phone No.:

Product Trade Name: CARBOPOL EZ-2 POLYMER
Chemical Name: Polyacrylic Acid
CAS No.: Mixture

Issue Date: July 15, 2008
Revision Date: July 1, 2015

Section 2. Hazards Identification

Hazard Classification

Unknown Toxicity	
Acute Toxicity, Oral	0.0%
Acute Toxicity, Dermal	0.0%
Acute Toxicity, Inhalation, Vapor	99.5%
Acute Toxicity, Inhalation, Dust/Mist	99.5%

OSHA Hazards

Combustible dust

Label Elements:

Hazard Symbol: None
Signal Word: Caution
Hazard Statement: May form combustible dust concentrations in air.
Precautionary Statement:
Prevention: Prevent dust accumulation to minimize explosion hazard. Keep away from heat/sparks/open flame/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment.
Response: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other: None identified.



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Section 3. Composition / Information on Ingredients

Hazardous Ingredients:

Chemical name	CAS Number	Percent by Weight
Cyclohexane	110-82-7	0.1 – 0.5%

Section 4. First Aid Measures

Eye Contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Water (moisture) swells this product into a gelatinous film which may be difficult to remove from the eye using only water. Immediately flush eyes with plenty of one percent (1%) physiological saline solution for five (5) minutes while holding eyelids open. If no saline is available, flush with plenty of clean water for fifteen (15) minutes. See a physician.

Skin Contact: Wash with water and soap. Get medical attention if irritation develops. Launder contaminated clothing before reuse.

Inhalation: Remove exposed person to fresh air if adverse effects are observed. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration. If irritation persists or if toxic symptoms are observed, get medical attention.

Ingestion: Treat symptomatically. Get medical attention.

Symptoms: See Section 11.

Treatment: Treat symptomatically.

Section 5. Fire Fighting Measures

Flash Point: Not applicable

Auto-ignition Temperature: ~ 480°C (896°F)

General Fire Hazards: Avoid hose stream or any method which will create dust clouds.

Suitable Extinguishing Media: Use water spray or fog, dry chemical or foam for extinction. CO₂ may be ineffective on large fires.

Unsuitable Extinguishing Media: Avoid hose stream or any method which may create dust clouds

Specific Hazards: See Section 10 for additional information.

Special Fire Fighting Procedures: This material has been evaluated and is considered to be a risk for dust explosion. It is categorized as Dust Explosion Class ST1.

Special Protective Equipment: In the case of fighting any fire, it is recommended that self-contained breathing apparatus be worn.



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Section 6. Accidental Release Measures

Personal Precautions:	Personal protective equipment, as defined in Section 8, must be worn.
Methods for Containment And Clean-Up:	Pick up free solid for recycle and/or disposal. Sweep up and place in a clearly labeled container for chemical waste. Avoid dust formation. Use wet sweeping compound or water to avoid raising a dust. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into closed container. Wash spill area with detergent. Material is slippery when wet. Prevent entry into sewers and waterways, dispose of in accordance with all federal, state and local environmental regulation.
Environmental Precautions:	Avoid release to the environment. Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Prevent entry into sewers and waterways. Take precautions to avoid release to the environment.

Section 7. Handling and Storage

Precautions for Safe Handling:	Wear personal protective equipment as defined in Section 8. Observe good industrial hygiene practices. Provide adequate ventilation. Avoid environmental contamination. Avoid conditions which create dust. Avoid breathing dust. Avoid contact with eyes and prolonged or repeated contact with skin. Ground container and transfer equipment to eliminate static electric sparks. Keep away from heat, sparks and open flame. Avoid drinking, tasting, swallowing or ingesting this product.
Maximum Handling Temp.:	Not determined
Safe Storage:	Store away from incompatible materials. See Section 10 for incompatible materials. Store in a dry, well-ventilated place. Keep containers closed when not in use.
Maximum Storage Temp.:	< 80°C < 176°F

Section 8. Exposure Controls / Personal Protection

Control Parameters:	
Exposure Limits:	None established
Other Exposure Limits:	Polyacrylic Acid, TWA, 0.05 mg/m ³
Engineering Controls:	To prevent dust explosions, employ bonding and grounding for operations capable of generating static electricity. Minimize dust generation and accumulation. Provide adequate ventilation.
Eye/Face Protection:	Use tight fitting goggles if dust is generated. Wear approved chemical safety glasses or goggles where eye exposure is reasonably probable.



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Skin Protection: Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur wear chemically protective gloves. Long sleeve shirt is recommended.

Respiratory Protection: Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Under normal conditions of use, respirator is not usually required. Use appropriate respiratory protection if exposure to dust particles, mist or vapors is likely.

Hygiene Measures: Always observe good personal hygiene practices such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Wash thoroughly after handling.

Section 9. Physical and Chemical Properties

The below data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.

Appearance:	White Powder	Explosive Limit:	No data available
Odor:	Mild, sour, acidic	Vapor Pressure:	No data available
pH:	2.5 – 3.0 (1% Water)	Vapor Density:	No data available
Melting Point:	No data available	Relative Density:	1.4 (20°C)
Boiling Point:	No data available	Solubility in Water:	Will Swell in Water
Flash Point:	Not applicable	Partition Coefficient:	Not determined
Evaporation rate:	No data available	Auto-Ignition Temp.:	~ 896°F (480°C)
Explosion Data:	Dust can form explosive mix	Decomp. Temp.:	No data available
Flammable Limit (UFL/LFL):	Not determined	Viscosity:	Not determined

Other Information:

Dust Explosion Properties:	157 – 193 m.b_/s
Minimum Ignition Energy:	100 – 300 mJ
Minimum Ignition Temp.:	~ 896°F (480°C)
Volume Resistivity:	4.70x 10+15 ohm-cm

Section 10. Stability and Reactivity

Stability:	Material is stable under normal conditions.
Reactivity:	No data available.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Static discharge, moisture, heat.
Incompatible Materials:	Stronge bases, alkalies, bases.
Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.



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Section 11. Toxicological Information

Information on likely routes of exposure:

Inhalation: No data available
Ingestion: No data available
Skin Contact: No data available
Eye Contact: No data available

Acute Toxicity:

Oral: Not classified for acute toxicity based on available data.
Dermal: Not classified for acute toxicity based on available data.
Inhalation: Not classified for acute toxicity based on available data.
Persons with sensitive airways (e.g., asthmatics) may react to vapors. Avoid inhalation of dust. Animal studies indicate the inhalation of respirable polyacrylate dust may cause inflammatory changes in the lung.
Skin Corrosion: Classification: Not irritating. (Read across); Rabbit.
Not expected to be a primary skin irritant.
Remarks: Pre-Existing skin conditions may be aggravated by prolonged or repeated exposure. Prolonged or repeated exposure may cause severe irritation.
Serious Eye Damage: Classification: Not irritating. (Read across); Rabbit.
Remarks: Particles in the eyes may cause irritation and smarting.
Remarks: Not expected to cause eye irritation.
Respiratory Sensitization: No data available.
Skin Sensitization: Classification: Not a skin sensitizer. (Read across); not a skin sensitizer.

Specific target Organ Toxicity – Single Exposure:

Aspiration Hazard: Cyclohexane: Material can be aspirated into the lungs during the act of swallowing or vomiting. This could result in severe injury to the lungs and death.
Product: This material readily absorbs moisture and may become thick and gelatinous upon contact with mucous membranes of the eye or upon inhalation into the nasal passages.

Chronic Effects:

Carcinogenicity: Not listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA
Mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductive Toxicity: No data available
Tetrogenicity: No data available

Specific Target Organ Toxicity – Repeated Exposure:

Product: A two-year inhalation study in rats exposed to a respirable, water absorbent sodium polyacrylate dust resulted in lung effects such as inflammation, hyperplasia, and tumors. There were no observed adverse effects at exposures of 0.05 mg/m³. In addition, long-term medical monitoring of potentially exposed workers has not revealed lung effects such as those observed in the rat. However, the inhalation of respirable dusts should be avoided by implementing respiratory protection measures and observing the recommended permissible exposure limit of 0.05 mg/m³.



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Section 12. Ecological Information

Ecotoxicity:

Fish:	Cyclohexane:	LC50 (Fathead Minnow, 4d): 4.5 mg/L
Aquatic Invertebrates:	Cyclohexane:	EC50 (Water flea (Daphnia magna), 2d): 0.9 mg/L
Toxicity to Aquatic Plants:	Cyclohexane:	EC50 (Green algae (Selenastrum capricornutum, 3d): 9.317 mg/L
Toxicity to Soil Dwelling Organisms:		No data available
Sediment Toxicity:		No data available
Toxicity to Terrestrial Plants:		No data available
Toxicity to Above-Ground Organisms:		No data available
Toxicity to Microorganisms:		No data available

Environmental Fate:

Biodegradation:	Cyclohexane:	OECD TG 301 F, 77%, 28d
	Miscellaneous:	9%, 28d, Not readily degradable

Bioaccumulation:

Bioconcentration Factor (BCF):	No data available
Partition Coefficient:	n-octanol/water (log Kow):
	Cyclohexane: Log Kow (3.44)
Soil Mobility:	Not determined

Section 13. Disposal Considerations

Disposal Instructions: Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue which may exhibit hazards of product.

Contaminated Packaging: Container packaging may exhibit hazards.

Section 14. Transport Information

DOT:

UN Number:	UN 3077
UN Proper Shipping Name:	Environmentally hazardous substance, solid, n.o.s.
Transport Hazard Class:	
Class:	9
Label:	9
Packing Group:	III
Marine Pollutant:	Yes
Special precautions for user:	None established
Reportable Quantity:	Cyclohexane: 1000 lbs
	Ethyl Acetate: 5000 lbs

IMDG: Not regulated

IATA: Not regulated

Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code: None Known.



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Section 15. Regulatory Information

Global Chemical Inventories:

United States (TSCA):	All components of this material are on the US TSCA Inventory or exempt.
European Union (REACH):	All components are in compliance with the EC Seventh ammendment Directive 92/32/EEC. To obtain information on the REACH compliance status of this product, please visit Lubrizol.com/REACH , or email Lubrizol at REACH_MSDS_Inquiries@Lubrizol.com .
Japan (ENCS):	All components are in compliance with the Chemical Substance Control Act of Japan.
Australia (AICS):	All components are in compliance with the chemical notification requirements in Australia.
New Zealand (NZIoC):	All components are in compliance with the chemical notification requirements in New Zealand.
Canada (DSL/NDSL):	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
Switzerland (SWISS):	All components are in compliance with Environmentally Hazardous Substance Ordinance in Switzerland.
Korea (ECL):	All components are in compliance in Korea.
Philippines (PICCS):	All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
China (IECSC):	All components of this product are listed on the Inventory of Existing Chemical Substances in China.
Taiwan (TCSCA) :	All components are listed on the Taiwan inventory.

Other U.S. Federal Regulations:

SARA Hazard Categories:	None known
SARA 302 Ext. Haz. Subst.:	No information available
SARA 304 Emergency Release Notification:	No information available
SARA 311/312 Hazardous Chemical:	No information available
SARA Section 313:	This product may contain chemicals regulated under the Superfund Amendments and Reauthorization Act (SARA). For additional information, please contact Lubrizol Customer Service.
Americas:	AmerLZAMCustomerAssistance@Lubrizol.com
Europe:	EMEAICustomerAssistance@Lubrizol.com
Asia:	APCustomerAssistance@Lubrizol.com

State Regulations:

California Proposition 65:	This product contains the following chemical(s) known to the State of California to cause cancer and/or birth defects based on maximum impurity levels of components: None
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The information that was used to confirm the compliance status of this product may deviated from the chemical information shown in Section 3.



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Section 16. Other Information

HMIS Rating:

Health: 1
Flammability: 1
Reactivity: 0
Personal Protection: E

NFPA Rating:

Health: 1
Flammability: 1
Reactivity: 0

History:

Issue Date: July 15, 2008
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MANUFACTURER'S STATEMENT:

NONWARRANTY - The facts stated and the recommendations made herein are based on our own research and/or the research of others, and are believed to be accurate. No guarantee of their accuracy is made however, and unless otherwise expressly provided in written contract, the products discussed are sold without conditions or warranties, expressed or implied. Protameen Chemicals assumes no responsibility for personal injury or property damage to users or third parties caused by this material. Recipient agrees to assume all risk and liability, including infringement of any patented invention, whether used singly or in combination with other materials.