SAFETY DATA SHEET

Monophosphonic Acid Resin SDS

Revision Date: 01-Feb-18

Section 1: Chemical Product and Company Identification

Product Name Monophosphonic Acid Resin

Product Number(s): MPA-B01, MP-B01-20-50, MP-B100-20-50, MP-B300-20-50, MP-B500-20-50

Product Synonym(s): Monophos Resin; Monophos Ion Exchange Resin

Identified Uses: Laboratory chemicals, manufacture of substances

Manufacturer: Eichrom Technologies LLC
1955 University Lane
Lisle, Illinois 60532

General Information: (8-5 CST M-F)
800-422-6693 (in USA)
630-963-0320

24 Hour Emergency Number (US/Canada): 1-800-255-3924 CHEMTEL Contract #:MIS9554039

24 Hour International Access Number: 1-813-248-0585

Country Specific Emergency Numbers:

Australia: 1-300-954-583
Brazil: 0-800-591-6042
India: 000-800-100-4086
Mexico: 1-800-99-731

Section 2: Hazard(s) Identification

2.1 Classification of the substance or mixture

GHS Classification of substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)

Skin Irritant and Eye Irritant
Respiratory Tract Irritation

2.2 GHS Label elements, including precautionary statements

Pictogram:

Signal Word: Warning

Hazard Statement(s):

H315+H319	Causes skin irritation and serious eye irritation
H335	May cause respiratory irritation

Precautionary Statement(s):

Prevention	P261	Avoid breathing dust.
	P264	Wash hands thoroughly after handling.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves, clothing, and eye protection.
Response	P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P332+P313	If skin irritation occurs, seek medical attention.
	P337+P313	If eye irritation persists, get medical attention.
	P362+P364	Take off contaminated clothing and wash before reuse.
Storage	P403+P233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
Disposal	P501	Dispose of contents/container in accordance with federal, state, and local regulations.

2.3 Hazards Not Otherwise Classified (HNOC) or not covered by GHS:

Section 3: Composition / Information on Ingredients

Component	CAS_Number	Percentage Range
Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, phosphonomethylated sulfonated	443680-68-0	65-67%
Water	007732-18-5	33-35%

Section 4: First-aid Measures

General Advice	The hazardous properties of this material have not been established. Information is based on compositionally and physically similar materials.
Ingestion	IF SWALLOWED: Call a POISON CONTROL CENTER or doctor if you feel unwell.
Skin Contact	Wash immediately with soap and copious amounts of water. Remove and wash contaminated clothing promptly. If irritation develops, seek medical attention.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.
Inhalation	Remove to fresh air. If breathing is labored, administer oxygen. If not breathing, give artificial respiration. Seek medical attention.
Most important symptoms and effects, both acute and delayed	No further relevant information available.
Indication of any immediate medical attention and special treatment needed	Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Section 5: Firefighting Measures

Extinguishing Media	Use fire extinguishing methods suitable to surrounding conditions
	Foam, CO2, Dry Chemical
Fire and Explosion Hazards	Product is not combustible until moisture is removed; autoignition occurs above 500°C.
	Highly toxic and irritating fumes may be released and extinguishing water runoff may be toxic.
Protective Equipment	Wear positive pressure self-contained breathing apparatus and full personal protective equipment.
Special Hazards	Possible combustion products include, but are not limited to: alkylbenzenes, vinylbenzenes, phenol, phosphoric acid, carbon dioxide, sulfur oxides, water, organic sulfonates.

Section 6: Accidental Release Measures

Personal precautions	Surface may be slippery.
	Avoid creating and breathing dust. See section 8.
	Use proper personal protect equipment (specified in section 8)
Methods and materials for containment and clean-up	Sweep up material and transfer to a suitable container for disposal.
Reference to other sections	For disposal see section 13.

Section 7: Handling and Storage

Conditions for safe handling	Avoid freezing or dehydrating; beads may fracture during thawing or rehydration.
	Use mechanical exhaust if dust is formed.
Conditions for safe storage	Normal warehouse storage in cool, dry area is satisfactory.
	Recommended storage temperature: 5 to 40 °C (40 to 104°F)
	Keep away from strong oxidizers.
Specific End Use(s)	Apart from the uses mentioned in section 1 no other specific uses are stipulated.

Section 8: Exposure Controls / Personal Protection

Control Parameters	Contains no substances with occupational exposure limit values.
Exposure Controls	Do not eat, drink or smoke when using this product.
	Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product.
	Normal ventilation is sufficient.
Eye protection	Wear safety glasses.

Body protection	Wear protective gloves and clothing.
Respiratory protection	Do not breathe dust.

Section 9: Physical Properties

Information on basic physical and chemical properties

Appearance:	Powder Translucent amber beads	Explosion Limits (Upper/Lower):	Not Applicable
Odor:	None	Flash Point:	Not applicable
Odor Threshold:	Not Established	Flammability:	Not flammable until all moisture is removed; resin starts to burn in flame at 230°C
pH:	Not applicable		
Melting Point:	0 °C (water); Not determined for solid	AutoIgnition Temperature:	Not Established
Boiling Point:	100 °C (water); Not determined for solid	Decomposition Temperature	Not Established
Relative Density:	44 -55 lb./cu. Ft.	VaporPressure:	Not Established
Solubility:	Insoluble in water	VaporDensity:	Not Established
Partition Coefficient:	Not Established	Evaporation Rate:	Not Established
Viscosity:	Not Applicable		

Section 10: Stability and Reactivity

Reactivity	No hazardous reactions if stored and handled as indicated.
Chemical Stability	Stable under normal handling and storage conditions.
	Freezing resin my cause beads to crack.
Hazardous Reactions	No hazardous reactions are expected in normal laboratory use. Hazardous polymerization will not occur.
Conditions to Avoid	Exposure to elevated temperatures can cause product to decompose.
Materials to Avoid	Contact with strong oxidizers will degrade material.
Hazardous decomposition Products	No hazardous decomposition products if stored and handled as indicated. See also section 5.
	Possible combustion products include carbon monoxide, carbon dioxide, alkylbenzenes, vinyl benzenes, phenol and phosphoric acid.

Section 11: Toxicology Information

Other

No data are available for this material. The information shown is based on profiles of compositionally similar materials.

Acute Toxicity

- Oral Effects: No data available for acute oral effects. Single dose oral toxicity is believed to be low.
- Inhalation Effects: Inhalation LC50 has not been determined. Vapors are unlikely due to physical properties, however if dust is observed, avoid inhaling.
- Dermal Effects: Dermal LD50 has not been determined.

Skin corrosion/irritation

No test data available regarding skin irritation. Slight irritation expected.

Serious eye damage/irritation

No test data available. Slight irritation expected.

Respiratory or skin sensitization

No data available regarding respiratory sensitization effects of this product.

Germ Cell Mutagenicity

No data available regarding mutagenic effects of this product.

Carcinogenicity

No data available regarding carcinogenic effects of this product.

Reproductive Toxicity

No data available regarding reproductive effects of this product.

Specific Target Organ Toxicity

- Single Exposure: No data available regarding specific target organ toxicity single exposure.

Repeated Exposure	No data available regarding specific target organ toxicity repeated exposure.
Aspiration Hazard	No data available regarding the aspiration hazard of this product.

Section 12: Ecological Information

	*The product has not been tested. The statement has been derived from the properties of individual components using an additivity method.
Aquatic Toxicity	No data are available on the adverse effects of this material on the environment.
Persistance and degradability	No data are available for persistance and degradability.
Bioaccumulative potential	No data are available for bioaccumulative potential.
Mobility in Soil	No data are available for mobility in soil.
PBT/vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Other	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13: Disposal Considerations

General	Dispose of contents/container in accordance with federal, state, and local regulations.
Unused:	Bury resin in licensed landfill or burn in approved incinerator equipped with an afterburner and scrubber according to local, state, and federal regulations.
Used:	For resin contaminated with hazardous materials, dispose of mixture as hazardous material according to local, state, and federal regulations.

Section 14: Transport Information

Air Transport:	Not Hazardous per IATA 2014
Ground Transport:	Not D.O.T. Hazardous
Water Transport:	Not Hazardous per IMDG 2012.

Section 15: Regulatory Information

US Federal Regulations	Toxic Substances Control Act (TSCA): All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

Section 16: Other Information

Revision	19-Jun-15: Updated to GHS SDS format, including classification
	28-Aug-15: Fixed linkages to print CAS numbers in component section.
	Replaces 19-Jun-15 Revision
	1-Feb-2018: Update Emergency Phone Numbers
SDS Prepared By:	Eichrom Technologies LLC