

SAFETY DATA SHEET

Monophosphonic Acid Resin SDS

Revision Date: 28-Aug-15

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:

CHEMTREC: 800-424-9300

Section 2: Hazard(s) Identification



GHS Signal Word: **Warning**
GHS Classification of substance or mixture: Skin Irritant and Eye Irritant
Respiratory Tract Irritation

Hazard Statement(s):
H315+H319 Causes skin irritation and serious eye irritation
H335 May cause respiratory irritation

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.
P304+P340+P312 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a doctor if you feel unwell.
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.

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

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

Section 8: Exposure Controls / Personal Protection

Control Parameters	Contains no substances with occupational exposure limit values.
Exposure Controls	Normal ventilation is sufficient. Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using this product.
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	Autolgnition 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	Freezing resin may cause beads to crack. Stable under normal handling and storage conditions.
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	Possible combustion products include carbon monoxide, carbon dioxide, alkylbenzenes, vinyl benzenes, phenol and phosphoric acid. No hazardous decomposition products if stored and handled as indicated. See also section 5.

Section 11: Toxicology Information

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

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.
Persistence and degradability	No data are available for persistence 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

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

The information set forth herein has been gathered from standard reference materials and is to the best knowledge and belief of Eichrom Technologies LLC, accurate and reliable. Such information is offered solely for your consideration, investigation and verification, and does not suggest or guarantee that the hazard precautions or procedures mentioned are the only ones that exist. Eichrom Technologies LLC makes no warranties, express or implied, with respect to the use of such information or the use of the specific material identified herein in combination with any other material or process, and assumes no responsibility therefore.