SAFETY DATA SHEET

LN Resin SDS - Column

Revision Date: 01-Feb-18

Section 1: Chemical Product and Company Identification

Product Name LN Resin

Product Number(s): LN10-C01-S, LN10-C20-S, LN-C01-A, LN-C20-A, LN-C50-A

Product Synonym(s): LN Resin Column

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)

Acute toxicity, Dermal (Category 4)
Skin corrosion/irritation
Respiratory Tract Irritation
Acute and Chronic hazards to the aquatic environment (Category 3)

2.2 GHS Label elements, including precautionary statements

Pictogram:

Signal Word Danger

Hazard Statement(s):

H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H335	May cause respiratory irritation
H402+H412	Harmful to aquatic life (acute and long lasting)

Precautionary Statement(s):

Prevention	P264	Wash hands thoroughly after handling.
	P271	Use only outdoors or in a well-ventilated area.
	P273	Avoid release to the environment.
	P280	Wear protective gloves, clothing, and eye protection.
Response	P301+P330+P331	IF SWALLOWED: Rinse mouth. DO NOT induce vomitting.
	P303+P361+P353	IF ON SKIN (or hair): Immediately remove all contaminated clothing. Rinse skin (or hair) with water.
	P304+P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	IMMEDIATELY call a POISON CONTROL CENTER or doctor.
	P363	Wash contaminated clothing before reuse.
	P391	Collect Spillage.
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
0.05 N nitric acid (0.15% W/V in water)	7697-37-2	60-70%
Nonionic Acrylic Ester Polymer	Trade Secret	18-24%
Bis(2-ethylhexyl) phosphate	298-07-7	12-16%

Section 4: First-aid Measures

General Advice	The hazardous properties of this material have not been established. Treat material as if it were toxic when evaluating first aid requirements.
Ingestion	If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.
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	Irrigate immediately with water for 15 minutes. Mechanical irritation is possible; seek 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	The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11. Further important symptoms and effects are so far not known.
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	Foam, CO2, Dry Chemical
Fire and Explosion Hazards	Polymer does not support flame.
	Highly toxic and irritating fumes may be released and extinguishing water runoff may be toxic.
	Nitric acid can react explosively with certain reducing agents and combustibles such as metal powders, carbides, hydrogen sulfide and turpentine.
Protective Equipment	Wear positive pressure self-contained breathing apparatus and full personal protective equipment.
Special Hazards	Possible combustion products include phosphorous oxides, phosphoric acid, carbon dioxide, and carbon monoxide, in addtion to unidentified organic compounds.

Section 6: Accidental Release Measures

Personal precautions	Avoid creating and breathing dust. See section 8.
	Surface may be slippery.
	Use proper personal protect equipment (specified in section 8)
Methods and materials for containment and clean-up	Use adsorbent material to collect liquid component
	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 contact with skin and eyes. Avoid inhalation of vapor or mist.
	Use mechanical exhaust if dust is formed.
Conditions for safe storage	Normal warehouse storage in cool, dry area is satisfactory.
	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	Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product.
	Mechanical exhaust is required.
	Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product.
	Mechanical exhaust is required.
Eye Protection	Wear safety goggles and/or face shield.
Skin Protection	Wear impervious gloves and clean body-covering clothing.
Respiratory protection	Use NIOSH/MSHA approved respirator when handling material outside of mechanical exhaust. An air-purifying respirator with an organic vapor cartridge or canister may be permissible.
	Do not breathe dust.
	Use NIOSH/MSHA approved respirator when handling material outside of mechanical exhaust. An air-purifying respirator with an organic vapor cartridge or canister may be permissible.
	Do not breathe dust.

Section 9: Physical Properties

Information on basic physical and chemical properties

Appearance:	Powder-Liquid Mixture White bead in colorless liquid	Explosion Limits (Upper/Lower):	Not Established
Odor:	low ammonia to none	Flash Point:	Not applicable
Odor Threshold:	Not Established	Flammability:	Not Established
pH:	1.3 (dilute acid)	AutoIgnition Temperature:	Not Established
Melting Point:	0 to -5°C (dilute acid); Not determined for solid	Decomposition Temperature	Not Established
Boiling Point:	100 °C (dilute acid)	VaporPressure:	Not Established
Relative Density:	solid is 0.35 g/mL	VaporDensity:	Not Established
Solubility:	(in water) Beads are insoluble	Evaporation Rate:	Not Established
Partition Coefficient:	Not Established		
Viscosity:	Not Established		

Section 10: Stability and Reactivity

Reactivity	No hazardous reactions if stored and handled as indicated.
Chemical Stability	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	No relevant information available.
Materials to Avoid	Contact with strong oxidizers will degrade material.
Hazardous decomposition Products	Possible combustion products include carbon monoxide, carbon dioxide, and phosphorous oxides.

Section 11: Toxicology Information

	The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.
Acute Toxicity	
Oral Effects	Polymer, Oral LD50 > 5,000 mg/kg (rat).
	Extractant, Oral LD50 = 5,236 mg/kg (rat).
	Ingesting acid may irritate or burn mouth, throat, and stomach.
Interperitoneal	Extractant, Interperitoneal LD50 is 50 mg/kg (rat).

Inhalation Effects	Nitric Acid LC50 = 138 ppm/30 min (rat).
Dermal Effects	Polymer, Dermal LD50 > 5,000 mg/kg (rabbit).
	Extractant, Dermal LD50 is 1,325 mg/kg (rabbit).
Skin corrosion/irritation	
	Nitric Acid solution is Non-corrosive to skin via Corrositex® (skin) test.
	Repeated exposure of the skin to low concentrations of nitric acid may cause dermatitis, characterized by erythema, itching and a dry scaly appearance.
Serious eye damage/irritation	
	Extractant, Eye - Corrosive (Rabbit, 24 hr).
Respiratory or skin sensitization	
	Long term inhalation exposure to nitric acid fumes can lead to chronic respiratory irritation such as bronchitis and may also lead to dental erosion as the nitric acid deposits on the teeth and erodes the outer coating of enamel.
Germ Cell Mutagenicity	
	No data available regarding mutagenic effects of this product.
Carcinogenicity	
	No data available regarding carcinogenic effects of this product.
Reproductive Toxicity	
	Animal studies provide no indication of a teratogenic effect for nitric acid. No data available for other components. No other reproductive data available for nitric acid.
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	
Acute Toxicity to fish	LC50 - Oncorhynchus mykiss (rainbow trout) - 48-54 mg/l - 96.0 h for bis(2-ethylhexyl) phosphate
Acute Toxicity to aquatic invertebrates	LC50 - Daphnia magna (Water flea) - >42 mg/l - 48 h for bis(2-ethylhexyl) phosphate
Acute toxicity to aquatic plants	EC50 - Chlorella emersonii - 50-100 mg/l - 48 h for bis(2-ethylhexyl) phosphate
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. Very toxic to aquatic life with long lasting effects.

Section 13: Disposal Considerations

General	Dispose of contents/container in accordance with federal, state, and local regulations.
	Avoid disposal to sewers and local waterways.
	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.
	Dispose of liquid according to local regulations for acids.
	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

Contact Eichrom for information regarding shipping classification.

Section 15: Regulatory Information

US Federal Regulations

Toxic Substances Control Act (TSCA): This material is provided to you under the research and development (R&D) exemption.

US State Regulations

This product contains no listed substances known to the state of California to cause cancer, birth defects, or other reproductive harm, at levels which would require a warning under California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act)

Section 16: Other Information

Revision	Updated to GHS SDS format, including classification
	1-Feb-2018: Update Emergency Phone Numbers
SDS Prepared By:	Eichrom Technologies LLC