



Metalsorbents

Metalsorbents are metal precipitating agents for water and wastewater applications in municipality and industrial operations. Metalsorbents are a range of sulfur based chemical precipitants (anionic) that readily bond with metals in their dissociated forms (cationic), forming an insoluble compound that readily precipitates, and is subsequently removed from the treated stream through settling or filtering. In order to decrease production of potentially toxic gases, sulfur is chemically bonded to an organic molecule, forming dithiocarbamate. Various grades are available corresponding to various organic substrates. Metalsorbents are efficient in removing a wide array of complex or chelated metals, including copper, zinc, chromate, silver, cadmium, lead, mercury, cobalt, and nickel.

Principal Uses

- Ø Precipitation of chelated or complex metals (e.g., copper) bearing effluent from electroplating or metal finishing manufacturers.
- Ø Precipitation of heavily chelated, electro-less nickel from soluble nickel effluent.
- Ø Highly efficient precipitation of zinc that is rapid settling.
- Ø Precipitation and recovery of cadmium at a ratio of 3.5:1.
- Ø Economical metal recovery of silver, even at very low concentrations.
- Ø Complete precipitation of chromate, even hexavalent.
- Ø Effectively precipitates lead at nearly a 1:1 ratio.
- Ø High precipitation of mercury leaving very little to discharge.

Advantages

- Precipitates complex and chelated metals
- Higher metal recovery
- Applicable over a pH range of 3 to 10
- Improves sludge density
- Enhanced flocculant stability
- Excellent use economy

Handling & Storage

Metalsorbents are mildly corrosive. Avoid contact with skin and eyes. Protective clothing and goggles **must be** worn while handling the product. Avoid prolonged or repeated breathing of vapor. Use with adequate ventilation. Do not ingest. In case of contact, wash skin with soap and water. For eyes, immediately flush with large amounts of water for at least fifteen minutes and get medical attention. Remove contaminated clothing and wash before reuse.

Although Metalsorbents have excellent stability, temperatures exceeding 100°C and below 0°C and highly acidic conditions may lead to product degradation.

Properties

Appearance:	Clear amber liquid
Specific Gravity:	1.18
Measured pH (as supplied):	11.8
Freezing point:	< 30°F

Government Approval/Regulatory Information

For Chemical Inventory regulatory control listing information for the U.S., see the MSDS.

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