

ISOLUX[®]

ARSENIC REMOVAL SYSTEMS

Unique, User-Friendly Cartridge Technology

ISOLUX[®] Zirconium media is the only arsenic removal media in the industry in powder form. Powder has much more surface area than granular medias. This gives it the ability to pull up 99% of the arsenic in a water stream in less than 30 seconds versus 3 to 5 minutes with granular medias. This fast uptake is precisely what makes the unique, no-backwashing, ISOLUX[®] cartridge technology possible.

Clean and Convenient

- ISOLUX[®] cartridges are sealed so there is never any contact with messy media.
- 42" long, 4.5" in diameter and weighing only 21 pounds, cartridges can easily be loaded by one person.
- **No need for backwashing.**
- Spent cartridges can simply be thrown in the garbage.*



Easy-to-handle cartridges.



Zirconium Hydroxide Adsorption Media Made Specifically for Arsenic Removal



The patented Zirconium Hydroxide adsorption media sets ISOLUX[®] shoulders above all other Arsenic treatment technologies. Until now, you may not have heard of it, but Zirconium has been used for decades worldwide for Arsenic removal.

Unmatched Performance

- Un-paralleled **non-leachable arsenic bond**.
- Removes Arsenic III & V simultaneously.
- Verified for **99% to non-detect (zero) arsenic removal***.
- Non-toxic. Media routinely passes the USEPA TCLP test as non-hazardous waste safe for landfill.*
- Media NSF 61 certified for drinking water use.
- Imparts no odor, taste or color to water.

* USEPA TCLP tested as non-hazardous waste safe for landfill, but due to variances in influent water quality, users are urged to perform independent verification of the non-hazardous character of spent media cartridges. Additionally, some states may have disposal criteria different from Federal guidelines (TCLP).

Cartridge System
for Convenience
Zirconium Media
for Unmatched Performance

MADE IN THE USA

ISOLUX® Zirconium Hydroxide is an environmentally safe, highly efficient inorganic adsorption media designed specifically for the removal of arsenic from drinking water and process water streams.

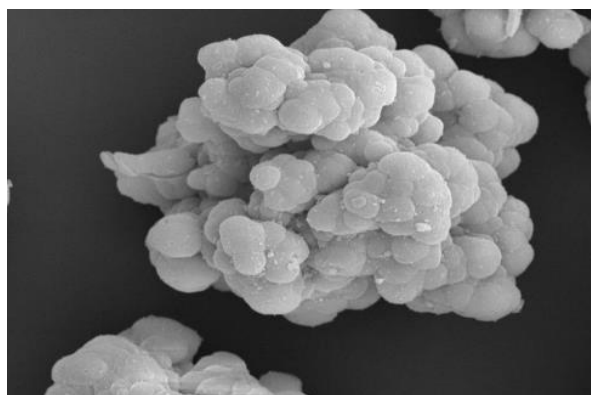


Basic physical and chemical properties:

- Physical state: Solid
- Appearance: Powder.
- Molecular mass: 159.253 g/mol
- Color: White.
- Odor: Odorless.
- Odor threshold: Not applicable
- pH : Not applicable
- pH solution: 6 - 8 as a 10% slurry in water
- Relative evaporation rate (butylacetate=1): Not applicable
- Melting point: > 100 °C
- Freezing point: > 100 °C
- Boiling point: Not applicable
- Flash point: Not applicable
- Self-ignition temperature: Not applicable
- Decomposition temperature: 550 °C
- Flammability (solid, gas): Non-flammable.
- Vapor pressure: No data available
- Relative vapor density at 20 °C: No data available
- Relative density: 0.8 - 1.2
- Solubility : Water: < 1 mg/l
- Log Pow: Not applicable
- Log Kow: Not applicable
- Viscosity, kinematic: Not applicable
- Viscosity, dynamic: Not applicable
- Explosive properties: Product is not explosive.
- Oxidizing properties: No oxidizing properties.
- Explosive limits: Not applicable

ISOLUX® Zirconium Hydroxide adsorption media employs both chemi-sorption reaction and ion exchange mechanisms. This combination provides for excellent affinity for the arsenate and arsenite ions while creating a very insoluble metal arsenate.

- Porous Range Ion selectivity, from < 2nm to 50 nm High.
- Adsorption Capacity Adsorption Capacity: 10-11mg/gr.
- Chemical Durability Operational range from pH 4 to pH 8.5.
- Exhibits fast kinetics of adsorption, 99% uptake in the first 10 to 30 seconds of contact.



Microphotograph of ISOLUX® media at 2,500X

For additional information, quotes & specifications, contact:

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