

SIRT SZT SORBENT

Product Description

SIRT SZT is an inorganic silicate compound in a free-flowing, ultra-fine powder form. The compound has a negatively-charged, internal crystalline lattice structure of exceptional strength and stability, with loosely bound cations that promote cation exchange. The interior channels or pores are 0.3 to 0.7 nanometers in diameter that act as a molecular sieve to selectively screen molecules according to size and exchangeable cations.

Due to its negative internal matrix polarity, SIRT SZT has high cation exchange affinity for ammonium (NH₄⁺) and dissolved heavy metals – lead, mercury, nickel, copper and cadmium.

Product Benefits & Applications

SZT is utilized as water treatment media to remove dissolved heavy metals (lead, mercury, nickel and cadmium) and ammonium (ammonia). When used as directed in waste water treatment, SZT provides improved settling, water clarification, ammonia and base metal adsorption, odor control and other purifying benefits.

This product is intended for use in:

- Various residential water filter devices;
- Municipal & Industrial water treatment;
- Mining waste water; Landfill barriers;
- Biological wetlands; Storm Water runoff
- Aquaculture;
- Soil remediation for heavy metal contaminants.

TYPICAL PROPERTIES

PHYSICAL FORM	Silicate, Free flowing powder.
COLOR	White
CATION EXCHANGE CAPACITY (CEC)	> 3.9 meq/g Pb
BULK DENSITY	25-30 lb./ft ³ 0.44 g/cc
SOLUBILITY IN WATER	Insoluble
CHEMICAL COMPOSITION	Proprietary Silicate
SURFACE AREA, BET	>600 m sq./g
MOISTURE CONTENT (LOD%) (per ASTM D-2116)	<10.0%
PARTICLE DISTRIBUTION	d50 ≥ 2.5 micron d90 ≤ 10.0 micron



Packaging:

SIRT SZT is available in 50 pound bags and 1000 pound Super Sacks.

Please contact us at 704-584-0029 or sales@surfatas.com to place your order.