

# Ionex<sup>®</sup> - Type Ag 900



A silver-exchanged zeolite for radio iodine removal from nuclear fuel reprocessing.

## Description

Ionex<sup>®</sup>-Type Ag 900 is a silver-exchanged zeolite developed especially for applications where high acid and thermal stability is desired. This product exhibits a mordenite crystalline zeolite structure and contains large adsorption channels, which are extremely uniform in size and permit efficient trapping of halogens from gas streams. Ag 900'S unusually high degree of acid stability makes it particularly useful for radio iodine removal from nuclear fuel reprocessing dissolver off-gas streams. The trapped iodine is chemically held within the adsorption channels as an insoluble solid to assure safe nuclear waste disposal.

## Typical properties

<b>Nominal Pore Size</b>	4.0 Angstroms
<b>Hardness Number, Ball Pan</b>	80 Minimum
<b>Equilibrium Water Capacity</b>	10% by weight
<b>Silver Content</b>	9% Minimum
<b>Flammability</b>	Non-flammable
<b>Thermal Stability</b>	Efficient adsorption up to 500° C
<b>Binder</b>	Highly acid-resistant binder
<b>Acid Stability</b>	Excellent (6N HCl reflux for extended periods with no degradation of crystalline structure)
<b>Silicon to Aluminum Ratio</b>	10:1
<b>Apparent Density</b>	0.94 g/ml for Ag-900 E16

## Standard particle sizes

Molecular designation	Particle size	Particle shape
E16	1/16 inch	Extrudate

Note: This spec sheet indicates physical properties that are standard and typical. Molecular Products Ltd. will supply material to custom specifications as requested.

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