

ASM-125

Antimony & silica selective, hybrid anion resin, styrene/DVB gel, chloride form

ResinTech ASM-125 is a chloride form antimony selective hybrid gel type 1 strong base anion resin. Hydrated iron oxide is monoatomically dispersed throughout the polymer, giving the product hybrid properties and exceptional capacity for radionuclides such as Antimony 125 and for neutral silica, while retaining its strong base capacity for anionic contaminants. ASM-125 is intended for the removal of Antimony 125 and other radionuclides from radwaste.



FEATURES & BENEFITS

- High Affinity For Antimony And Silica
- Effective In Layered Resin Systems Or In Mixed Beds
- Superior Physical Stability And Controlled Particle Size
- Low Chloride Content
- Patented Material

APPLICATIONS

- Antimony Removal
- Phosphate Removal
- Silica Removal



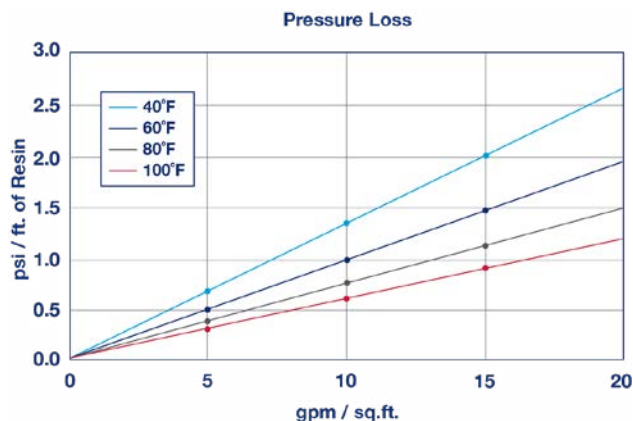
Meets NSF/ANSI/CAN 61

Meets NSF/ANSI/CAN 372

ASM-125

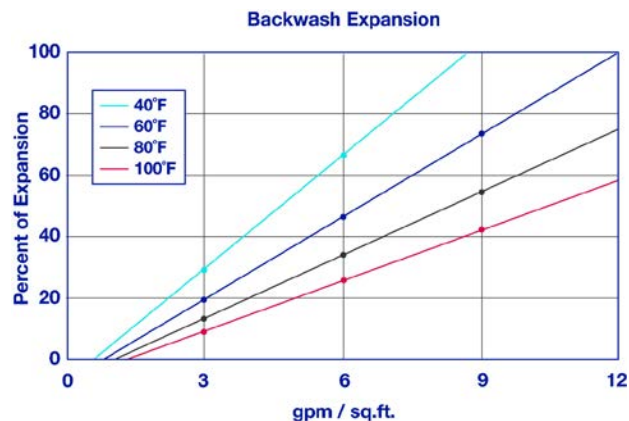
Polymer Matrix	Styrene/DVB	Minimum Sphericity (%)	93
Polymer Type	Gel	Uniformity	Gaussian
Ionic Form (as shipped)	Chloride (Cl ⁻)	Uniformity Coefficient	1.60
Functional Group	Hybrid	Capacity (meq/mL)	1.40
Physical Form	Test	Moisture Retention (%)	35% to 45%
Particle Size US Mesh (µm)	16 (1190) to 50 (297)	Shipping Weight	48 - 50 lbs/cu.ft. (769 - 801 g/L)
< 50 mesh (300 µm) %	< 1%	Color	Black

PRESSURE LOSS



The graph above shows the expected pressure loss of ResinTech ASM-125 per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH EXPANSION



The graph above shows the expansion characteristics of ResinTech ASM-125 as a function of flow rate at various temperatures.

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	250°F (121°C)	Operating pH Range	4.0 to 10.0
Minimum Bed Depth	12 in. (30.5 cm)	Flow Rate	
Maximum Pressure Loss	25 psi (172 kPa)	Working Service	1-10 gpm/cu.ft. (8-80 BV/h)

ANTIMONY REMOVAL

Trace levels of antimony are adsorbed by the iron hybrid material inside ResinTech **ASM-125**, which in all other respects remains a strong base anion resin. The resin is typically used as the bottom layer of a multilayer exchange tank. Antimony reduction is typically around 90%. In recycle applications where the source of antimony has been removed, remaining antimony can be reduced below the limit of detection.



SILICA REMOVAL

Chloride form ResinTech **ASM-125** can be used at moderate pH to remove silica from neutral water without reducing TDS. At a flow rate of 0.5 BV/min, treating water with a pH of 7.5, a removal efficiency of fifty percent is possible for several hundred bed volumes of throughput. Silica removal continues at reduced efficiency for many thousands of additional bed volumes. Even though silica removal is not complete, the lowering of silica helps maintain purity in spent fuel pools and other radwaste systems.

REMOVAL OF OTHER TRACE CONTAMINANTS

ResinTech **ASM-125** is also able to remove other traces of activated metal oxides such as nickel, tin, and tellurium.

PACKAGING**Standard**

1 cu.ft. Bag | 7 cu.ft. Drum

5 cu.ft. Drum | 42 cu.ft. Supersack

Metric

140L Drum | 1000 L Supersack

SAFETY DATA SHEETS (SDS)

Safety Data Sheets (SDS) are available for all products on the ResinTech website. They contain important health and safety information that may be needed to protect your employees and customers from any known health and safety hazards associated with our products. We recommend that you secure and study the pertinent MSDS for our products and any other products being used.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith.

However we do not make any guarantee or warranty. We caution against using these products in an unsafe manner or in violation of any patents; further we assume no liability for the consequences of any such actions.

Safety Data Sheets (SDS) are available at resintech.com