

Axens Adsorbents for Water Treatment

ActiGuard®



Preserving our Future

A complete, high performance range of specialty aluminas

Best technologies for **water remediation**



Activated alumina with its many types of adsorptive sites and high surface area is the perfect choice for the removal of contaminants from waters and to manage many remediation applications.

» **Storm Water:**

Zinc, copper, fluoride and phosphates are currently being removed in storm water applications. Axens Products are treating storm water at metal recycling centers, galvanizing yards, metal smelters, refineries and highway run off locations.

» **Marine Atmospheres:**

Copper and zinc are found throughout locations where corrosion protection calls for copper and zinc coatings and additions. Dry dock areas where copper laden paints are removed and applied are using ActiGuard® AAFS50 to lower the copper discharge levels. Ballast water and roof drainage discharge utilize ActiGuard products for zinc removal.

» **Oil and Gas:**

Axens adsorbents are being used to lower fluoride, arsenic, selenium and mercury.

Arsenic is found in water that has been in contact with certain crude oils, ActiGuard® AAFS50 is used to lower arsenic levels for reuse or discharge.

Fluoride scrubbing and its presence in the refining process creates fluoride removal applications for ActiGuard® AA400G.

Selenium is being associated with hydraulic fracturing water and oil field brine water. Axens is actively working in this area and providing treatment. ActiGuard adsorbents are also successful in effectively reducing mercury levels in higher concentrations (ppm levels).



» Mining:

Arsenic, fluoride, copper, zinc and silica are targeted at various stages throughout the mining industry. Axens is working at all levels from dewatering mines, stamping mills, tailings run off, smelters and decommissioned site remediation.

» Industrial Effluents:

Axens is assisting companies in maintaining process water for zero discharge applications and plant effluents.

» Site Remediation:

ActiGuard® AAFS50 at U.S. EPA remediation sites, at contaminated aquifers, for site remediation from wood treatment, pesticides, spills and abandoned or obsolete industrial sites is used to remove arsenic.



Advanced aluminas for **potable water**



Arsenic and fluoride are currently the most common applications for Axens products in these markets. New regulations for both elements have greatly increased demand for these products. Axens has developed promoted products for both applications.

» **Arsenic:**

ActiGuard® AAFS50 is an iron enhanced activated alumina, accomplishing arsenic removal with a very attractive low cost per volume of water treated ratio.

» **Fluoride:**

Activated alumina has been identified as the best technology and used for over forty years by communities to lower the fluoride to acceptable levels. ActiGuard® AA400G is the best choice for this application.

» **Bottled Water:**

Axens products are being utilized to remove both arsenic and fluoride from mineral and bottled water.

» **Systems:**

Axens is actively supplying specialty aluminas and working with companies to treat everything from small hand pump units in villages, small community, city municipal systems.



» Benefits

» Economical:

Low cost media coupled with high uptake capacities provides low cost per unit of volume.

» Robust Media:

Won't break down requiring extra backwashing or creating pressure drop.

» Easy Disposal:

Spent media passes TCLP and California WET.
May be recyclable in your area.

» Technical Support:

Specific modeling and laboratory work available for your specific water and application.

» Simple System Design:

Lead Lag for best performance and safety or passive flow for storm water applications.

» Certifications:

Some organizations like NSF/ANSI or United States Environmental Protection Agency, approved and certified our ActiGuard® adsorbents.



How to use QR Codes:

A/ To scan the QR Code you must have, or you can download one of the following free app on your Smartphone (Mobiletag, 2D sense, QR Reader,...)

B/ Scan the QR Code

C/ By default, you will be redirected to the mobile version.
Then click on 'See Axens Website' link (on the bottom right).

D/ Scan again. You can now scan any Code without being redirected to the mobile version of Axens' website.

ActiGuard® Water Treatment Products
are activated alumina products
designed and promoted to remove
metals and nutrients by adsorption.

» In Regenerative systems:

Use the ActiGuard® AA400G for fluoride
and arsenic removal.

» In Non-Regenerative systems:

Use the promoted grades, ActiGuard® AAFS50
and ActiGuard® F.



FOR MORE INFORMATION CONTACT:

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