

RESINA
ION EXCHANGE

Ion exchange resins for the removal of mercury or heavy metals

The optimal ion exchange resin for your application

Whether you need a mercury or heavy-metal removal solution, we have the right ion exchange resin for you.

Our resins are of the highest quality and provide effective and reliable removal of mercury or heavy metals from water using ion exchange columns. We offer two different ion exchange resins for different applications.

Contact us today to learn more about our ion exchange resin offerings. What are your application requirements? How does your process run? We can assist and advise you to determine which resin is best suited for your specific requirements.

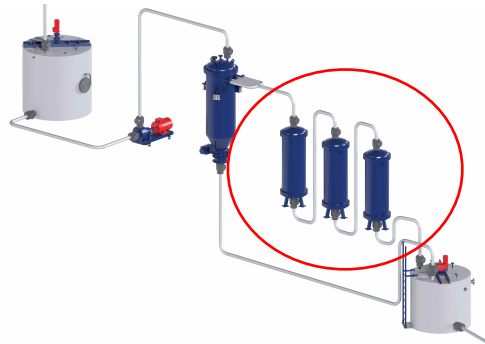
Ion exchange resin for mercury removal

Mercury-selective ion exchange resins play an important role in various industrial and environmental applications. These resins are specifically designed to efficiently adsorb mercury from solutions, while offering numerous advantages over conventional ion exchange resins.

A key feature of – mercury-selective ion exchange resins is their distinct affinity for mercury. This affinity or attraction is based on the specific chemical composition of the resin, which enables it to selectively attract mercury and bind it in the matrix of the resin. Due to this increased selectivity, they can leave other ions in the solution largely unaffected, which increases the efficiency of mercury removal and minimizes potential interference.

Applications of mercury-selective ion exchange resins span a variety of industries, including environmental, mining, chemical and electronics manufacturing. They are widely used in wastewater treatment plants, coal-fired power plant flue gas cleaning, and laboratories to ensure that mercury levels in solutions and wastewater meet specified limits.

The effectiveness of these selective resins in mercury removal has helped minimize the environmental impact of mercury while supporting environmental compliance. They also help reduce the risk of mercury poisoning and protect human and environmental health.



Ion exchange resins for mercury or heavy-metal separation

Ion-exchange resins are extremely common materials for the removal of heavy metals or mercury from industrial wastewater and process-water streams.

Ion exchange resin for heavy metal removal

These resins usually consist of small spheres or granules coated with special functional groups. These functional groups are designed to efficiently attract and bind heavy-metal ions through the mechanism of ion exchange.

The attraction and binding of heavy-metal ions occur due to the chemical properties of these func-

tional groups. These groups have a high affinity or attraction for heavy-metal ions, which means that they effectively „exchange“ the heavy-metal ions from the surrounding solution by binding them to the resin matrix. This completely dissolves the heavy-metal concentrations in the solution.

The applications for ion-exchange resins for heavy-metal removal are extremely diverse, ranging from

metal processing and the galvanic industry to wastewater treatment in mining and chemical plants. They also play a crucial role in environmental-protection measures, helping to minimize the environmental impact of heavy-metal emissions and ensure compliance with water-quality regulations.

Overall, ion-exchange resins are an indispensable tool for the treatment and purification of industrial wastewater to ensure that heavy metals are efficiently removed from these streams, thus protecting the environment and public health.





AIK Technik AG
Allmendstrasse 6 | CH-6210 Sursee | +41 41 510 65 00
info@aiktechnik.ch | aiktechnik.ch | **Residue today, commodity tomorrow**

