



Cr(6)
Chromium

CHROMIUM REMOVAL SOLUTION

GENERATE MORE VALUE WITH CLEAN WATER

TOXSORB offers a cost-effective, eco-friendly solution to remove inorganic contaminants from water and wastewater with exceptional precision. Powered by ground-breaking proprietary MAC technology, TOXSORB supports a circular economy by recovering pollutants and converting them into high-quality safe water at near-zero cost. By pinpointing the contaminants and enabling on-site regeneration, TOXSORB helps minimize brine, OPEX and environmental impact for enhanced public health and sustainability.

HIGH PRECISION TECHNOLOGY

Our media is extremely effective at selectively removing Cr(6) (Hexavalent Chromium) from drinking water and industrial wastewater, meeting the California State Water Resources Control Board requirements. In contrast to solutions based on Ion exchange where the Chromium pollutant is removed during regeneration, and requires disposal due to brine toxicity, TOXSORB offers a smart media with unique regeneration. Converting soluble Cr(6) to solid Cr(3) for evacuation and treating the contamination without producing hazardous brine. Thus, eliminating the need for liquid fraction haulage – enabling cost savings and diminished eco footprint.

SAFE, COST-EFFECTIVE & SUSTAINABLE



Safe & clean drinking water

Media does not accumulate hazardous metals



Minimizes haulage

Separation of waste to solids & non-hazardous brine



Double-value process

Removes inorganic & organic pollutants



Saves costs

Regenerable media



Efficient & sustainable

Selective removal of target pollutant



NSF / ANSI 61 Approved

Meeting the highest standards worldwide

THE PROCESS

MAC - NP2 is a Modified Activated Carbon technology specifically designed for the selective removal of Cr(6) from water. The media is composed of granular activated carbon, modified by chemical adsorption of a modifier. This creates a selective ion exchange media.

Unlike most selective ion exchange media, The MAC-NP2 can be easily regenerated using standard acid and base. Dissolved organic compounds are also removed by this media.

The MAC-NP2 capacity for Cr(6), is a function of water matrix and chromium concentration. For Cr(6) concentrations of 50 ppb, the media is regenerated every 10,000 Bed Volumes (BV). For optimal performance, the pH of the treated water should be 6.3. The OPEX is composed mainly of the acid for the pH adjustment, which is directly related to the water alkalinity.

TECHNICAL SPECIFICATIONS

Apparent density
0.67 g/cm³

Mean particle
size 1.2-1.4 mm

Hydraulic properties
similar to the granular
activated carbon

Chemical
regeneration with
HCl & NaOH



DRIVING GLOBAL PUBLIC HEALTH & SUSTAINABILITY

A business unit of the WFI group, ToxSorb delivers proven water and wastewater treatment solutions via proprietary technologies. Toxsorb's robust and cost-effective platform for removing heavy metals and other contaminants from drinking water exceeds the highest international standards. Our experienced and dedicated multidisciplinary team utilize their innovative approach to enable our global customer base to bring their unique water goals to fruition, while simultaneously curtailing pollution and saving costs.

LET'S CREATE MORE VALUE FROM WATER - TOGETHER

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TOXSORB
by WFI Group