



GC Filtral

activated alumina for fluoride and heavy metal removal

GC Filtral is a granular, activated alumina designed for the removal of lead, fluoride, chromium, zinc, iron, phosphates and other heavy metals from water. Highly adsorbent, the GC Filtral is able to adsorb as much as 1.4g fluoride per 100g alumina with less than 1 ppm fluoride evident in the water effluent. Conditioning of the GC Filtral with dilute aluminum sulfate prior to use greatly enhances performance. The adsorbent needs only to be contacted for one hour with 29 g/L of aluminum sulfate ($\text{Al}_2(\text{SO}_4)_3 \cdot 18\text{H}_2\text{O}$) solution and it is ready for use.

GC Filtral is available for sale in bulk or installed any of our liquid-phase treatment units. These filters come complete with internal plumbing and are ready for installation.

Chemical Analysis

	<u>Weight %</u>
Soda as Na_2O :	0.4
Iron as Fe_2O_3 :	0.015
Silicon as SiO_2 :	0.02
Titanium as TiO_2 :	0.002
Loss on Ignition (300-1000°C):	5.5-6

Physical Properties

Bulk Density, g/cc:	0.67
lbs./ft ³ :	42
Specific Surface Area, m ² /g:	350-380
Pore Volume, cm ³ /g:	0.44
Static Water Adsorption, %:	19-22

Caution!

Confined space/low oxygen procedures should be put in place before any tank entry is made. Such procedures should comply with all applicable Local, State and Federal guidelines.

CATION/ANION ADSORPTION LIST

CATIONS

THORIUM (+2)
ALUMINUM (+3)
URANIUM (+4)
ZIRCONIUM (+2)
CERIUM (+4)
IRON (+3)
CERIUM (+3)
TITANIUM (+3)
MERCURY (+2)
URANIUM OXIDE (+2)
LEAD (+2)
COPPER (+2)
SILVER
ZINC (+2)
COBALT (+2)
IRON (+2)
NICKEL (+2)
THALLIUM (+1)
MANGANESE (+2)

ANIONS

OH (-1)
 A_5O_4 (-3)
 PO_4 (-3)
 C_2O_4 (-2)
F (-1)
 SO_3 (-2)
 $Fe(CN)_6$ (-4)
 CrO_4 (-2)
 S_2O_3 (-2)
 SO_4 (-1)
 $Fe(CN)_6$ (-3)
 Cr_2O_7 (-2)
 NO_2
CNS (-1)
I (-1)
BR (-1)
Cl (-1)
 NO_3 (-1)
 MnO_4 (-1)
 ClO_4 (-1)
 CH_3COO (-1)
 S_2 (-1)