

## PRODUCT DATA SHEET



APTsorb is an innovative, environmentally friendly sorption media for dissolved heavy metals. APTsorb is made of physically-, thermally-, and chemically-modified reed-sedge peat harvested from the abundant reserves of North America. It capitalizes on the known sorption mechanisms and capacities of natural peat while improving on those qualities that have limited peat's use in wastewater treatment in the past.

APTsorb is a low-cost alternative to traditional resins and excels in applications such as polishing prior to discharge, stormwater treatment, and wastewater with low pH.

## **PROPERTIES AND SUGGESTED OPERATING CONDITIONS<sup>1</sup>**

Physical form	Granules
Matrix	Reed-sedge peat
Metal capacity	Dependent on matrix. Up to 10 mg/g in usual conditions.
Bulk density <sup>2</sup> (wet wt/wet vol)	54 lbs/ft <sup>3</sup> (0.87 g/cm <sup>3</sup> )
Particle size	12 X 50 mesh (>90 percent of granules)
Permeability (ASTM D2434)	1 cm/sec
Particle density	100 lbs/ft <sup>3</sup> (1.6 g/cm <sup>3</sup> )
Moisture content and expansion <sup>3</sup>	Shipped fully hydrated and expanded
pH of media <sup>1</sup>	6.0 – 7.2
Ash content	15 – 17 %
Maximum operating temperature	77° C (170° F)
pH of water to be treated	4 – 7.5
Recommended flow velocity (m/h)	Up to 10
Required backflush to lift bed	10 – 15 gpm/ft <sup>2</sup>
Pretreatment	Flush with five bed volumes clean water; discharge to drain.
Regeneration	Not recommended
Sparging/fluffing	Water, air, $CO_2$ or $N_2$

<sup>1</sup>Test methods available upon request.

<sup>2</sup> Because APTsorb is shipped fully saturated, the bulk density is expressed as saturated and drained weight over wet volume.

<sup>3</sup> If allowed to dry in the field, expect expansion of up to 45 percent upon rewetting.

APTsorb® is a trademark of American Peat Technology, LLC, Aitkin, Minnesota.

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