ADSORBSIA™ As500 Titanium Based Media

A titanium oxide adsorbent for the removal of arsenic, lead, and other heavy metals

Typical Physical and Chemical Properties

Product Type		Titanium oxide based granulation
Particle size range	Mesh	16-60
On 16 mesh	%	<5
Through 60 mesh	%	<10
Moisture Content	%	<15
Bulk Density	g/L	480
	lbs/ft^3	30
Specific surface area	m^2/g	200
Pore volume	cc/g	0.4
Equilibrium Capacity[a] (@ 50 ppb, pH 7)		
Arsenic (V)	g/Kg	12 - 15
Arsenic (III)	g/Kg	3 – 4
Selenite (IV)	g/Kg	4 – 5
Lead (II)	g/Kg	11[b]

a Static equilibrium capacity is measured at room temperature in ANSI/NSF Standard 53 challenge water.
b. Lead data collected at pH 4
Contact a Dow sales representative for a copy of the sales specification.

Typical Properties and Applications

ADSORBSIA™ As500 media is an easy to use granular titanium oxide with strong affinity for arsenic, lead and other heavy metals. This distinct media is designed for non-regenerative applications. The inherently high adsorptive capacity of Dow's titanium oxide based technology has been formulated into a mechanically stable granulation suitable for use in a broad range of potable water applications. When exhausted, it is removed from the vessel and replaced with new media. Spent media from arsenic loading tests have been shown to pass the U.S. Environmental Protection Agency's TCLP extraction protocol as well as both the WET and TTLC tests for California. ADSORBSIA As500 media is NSF/ANSI 61 certified without limitations.

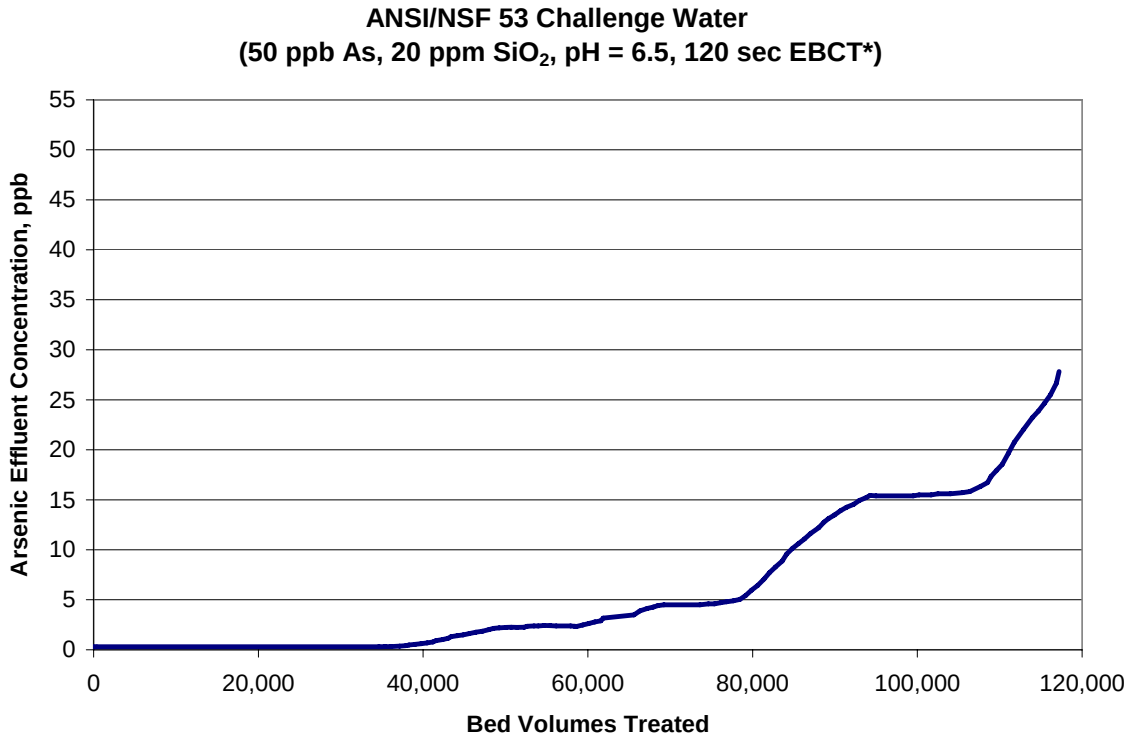

Figure 1. ADSORBSIA™ As500 media dynamic arsenic adsorption at pH 6.5. *EBCT = empty bed contact time

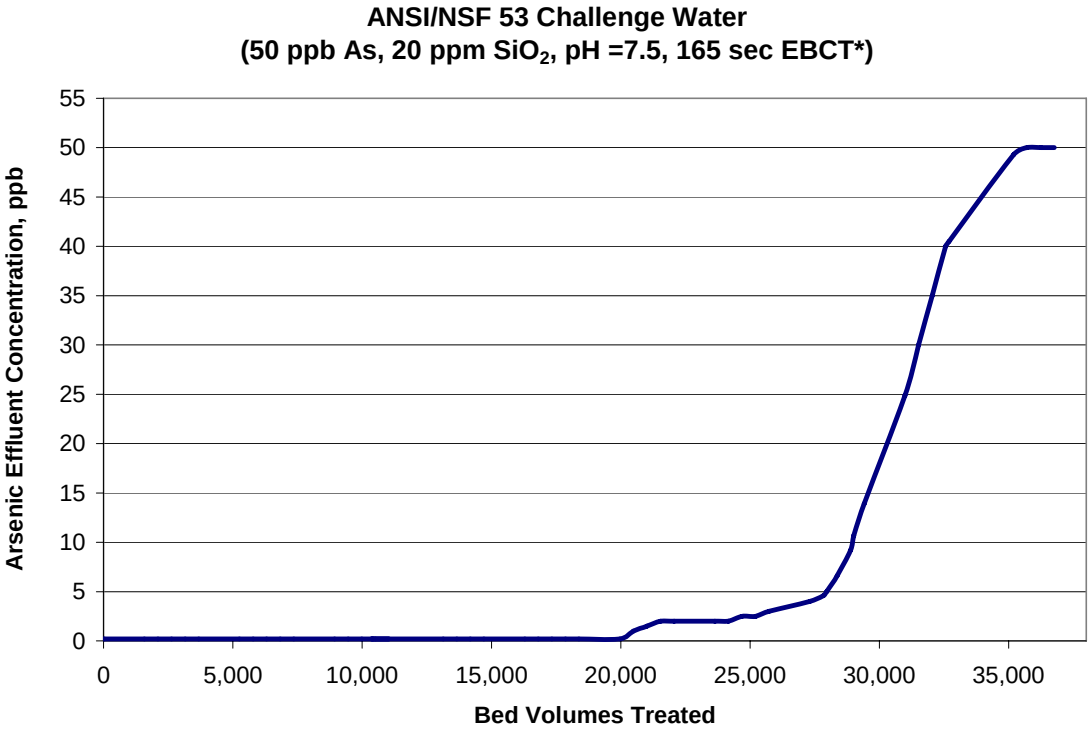

Figure 2. ADSORBSIA™ As500 media dynamic arsenic adsorption at pH 7.5. *EBCT = empty bed contact time

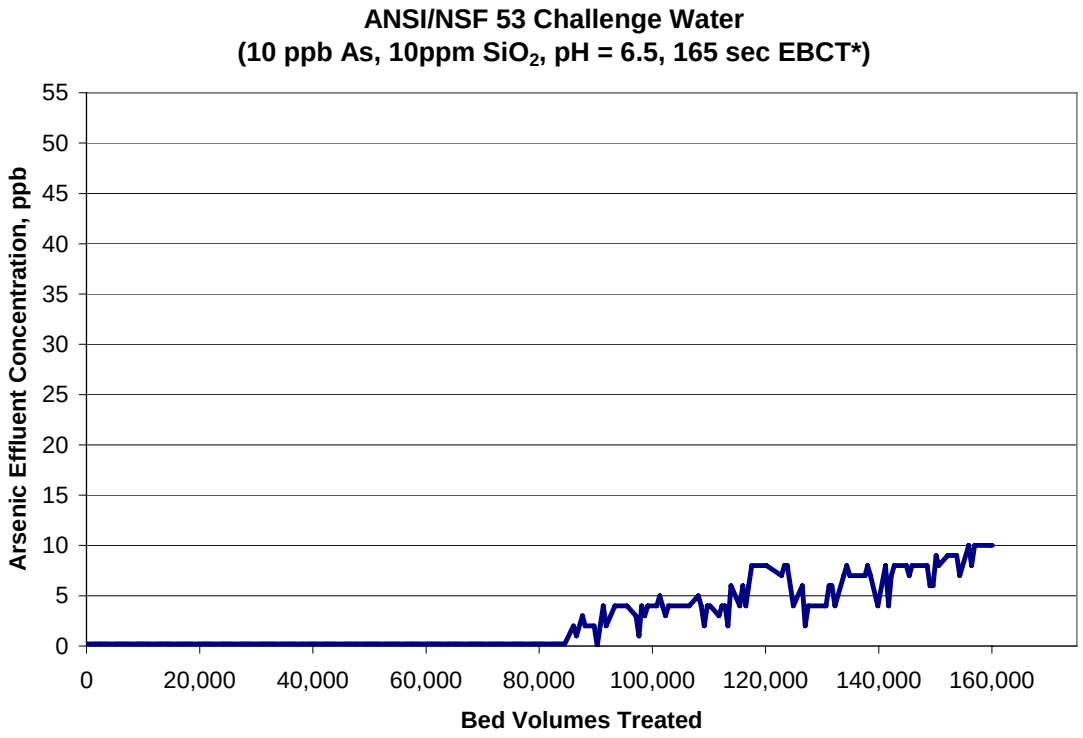

Figure 3. ADSORBSIA™ As500 media dynamic arsenic adsorption at pH 6.5, with low arsenic level. *EBCT = empty bed contact time

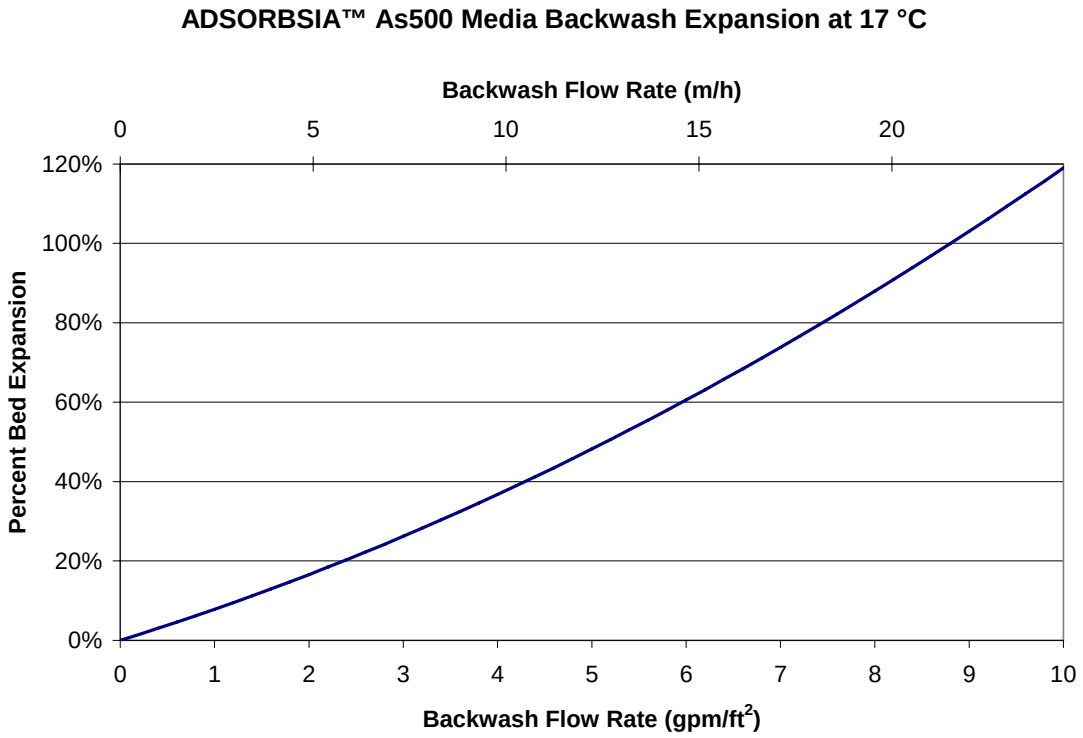

Figure 4. Backwash expansion data.

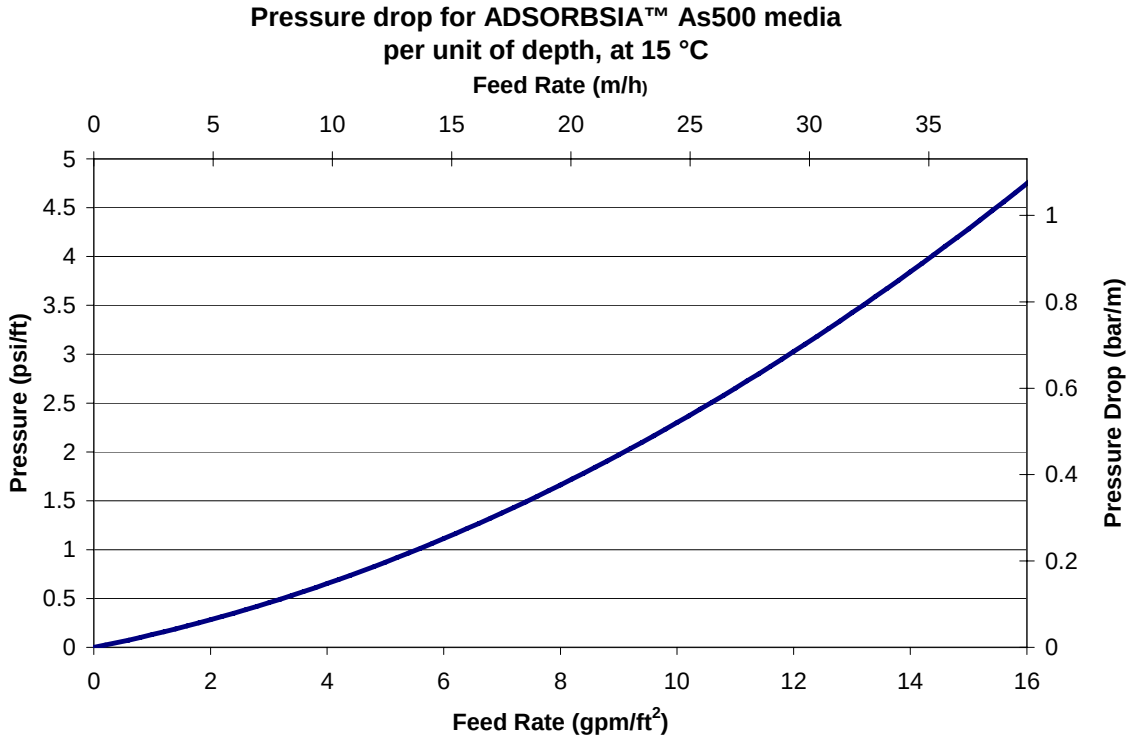

Figure 5. Pressure drop as a function of feed rate.

Note: This product may be subject to drinking water application restrictions in some countries; please check the application status before use and sale.

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