TECHNICAL DATASHEET

AquaSorb® 1000

Granular coal based activated carbon

Product Introduction

AquaSorb® 1000 is a medium activity granular activated carbon manufactured by steam activation from selected grades of bituminous coal. The perfect balance between adsorption and transport pores provide optimum performance in a wide range of water treatment applications. The product is a high density adsorbent and provides maximum volume activity. The material is water washed during manufacture and therefore wets rapidly. The excellent hardness and mechanical strength ensures negligible losses during backwashing, air scouring and multiple reactivations (consult technical bulletin TB-308/R/ENG for more information).

Product Key Features

- Medium activity
- Optimum pore size distribution
- Water washed
- Maximum hardness and abrasion resistance
- Several world-wide drinking water approvals

Benefits

- Proven drinking water adsorbent
- Both adsorption and transport pores
- High wettability, does not float, low dust
- Proven superior for multiple reactivations
- NSF 61, AWWA B604-96, EN12915

PARAMETER	UNIT	VALUE	TEST METHOD
Iodine number	mg g^{-1}	900	ASTM D4607
Surface area	m^2 g^{-1}	950	BET N_2
Methylene blue	mg g^{-1}	200	JACOBI T4001
Total pore volume	cm^3 g^{-1}	0.88	Porosimetry (N_2/Hg)
Apparent density	kg m^{-3}	500	ASTM D2854
Bed density, backwashed and drained	kg m^{-3}	430	Note 1
Wettability	%	99.5	JACOBI T4003
Moisture content - as packed	%	2	ASTM D2867
Water soluble matter	%	0.2	ASTM D5029
pH		8	ASTM D3838
Chlorine half length value (12x40 USS)	cm	3.0	DIN 19603
Ball-pan hardness number	%	96	ASTM D3802

TYPICAL APPLICATIONS

- Municipal drinking water treatment
- Residential drinking water treatment
- Adsorption of taste and odor
- Removal of pesticides and herbicides
- Soft drinks production
- Swimming pool filters
- Aquarium filters
- Protection of ion exchange resins
- MEA/DEA purification-gas sweetening

PARAMETER	UNIT	20x40 USS	12x40 USS	8x30 USS	10x20 USS	8x16 USS	6x12 USS
Available particle sizes	mm	0.425-0.85	0.425-1.70	0.60-2.36	0.85-2.00	1.18-2.36	
Oversize maximum	%	5	5	5	5	5	
Undersize maximum	%	4	4	4	4	4	
Effective size	mm	0.4	0.6	0.8	1.0	1.2	
Uniformity coefficient		1.5	1.7	1.7	1.6	1.5	
Mean particle diameter	mm	0.6	1.0	1.4	1.4	1.8	