



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

Note 1: Value is based on the backwashing of a bed of AquaSorb® 1000 activated carbon at 30% expansion, which has been allowed to drain and settle.

### 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	1.70-3.36
Oversize maximum	%	5	5	5	5	5	5
Undersize maximum	%	4	4	4	4	4	4
Effective size	mm	0.4	0.6	0.8	1.0	1.2	1.8
Uniformity coefficient		1.5	1.7	1.7	1.6	1.5	1.2
Mean particle diameter	mm	0.6	1.0	1.4	1.4	1.8	2.3



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T E C H N I C A L D A T A S H E E T

## Product Packaging



Polyethylene valve bags of 25 kg  
(55 lb) net weight on 500 kg  
(1100 lb) pallets



Polypropylene non-linear  
FIBCs (big bags) of 500 kg  
(1100 lb) net weight



All materials supplied are  
in full accordance with our  
ISO-9000 quality system.

**CAUTION** Activated carbon is a strong oxidizing agent and can remove oxygen from air under wet or humid conditions. Care should be taken when entering confined spaces where wet activated carbon is present. Ensure the use of correct breathing apparatus. Material Safety Data Sheets should be consulted for further details on procedures in the event of contact with activated carbon.

**NOTICE** Due to the progressive nature of Jacobi Carbons Group and the continually improving design and performance of our products, we reserve the right to change product specifications without prior notification. The information contained in this datasheet is intended to assist a customer in the evaluation and selection of products supplied by Jacobi Carbons. The customer is responsible for determining whether products and the information contained in this document are appropriate for the customer's use. Jacobi Carbons assumes no obligation or liability for the usage of the information in this datasheet, no guarantees or warranties, expressed or implied, are provided. Jacobi Carbons disclaims responsibility and the user must accept full responsibility for performance of systems based on this data.

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