



Jacobi
CARBONS

TECHNICAL DATA SHEET

FOR MORE INFORMATION: SWEDEN +46 31 810 0100, FINLAND +358 10 800 012, GERMANY +49 89 9 010 00,
UNITED KINGDOM +44 111 490 01, UNITED STATES 1 800 548 2000, EMAIL: INFO@JACOBI.COM, WEB: WWW.JACOBI.COM



AquaSorb® 2000

Granular coal based activated carbon

Product Introduction

AquaSorb® 2000 is a principal high activity granular activated carbon manufactured by steam activation from selected grades of bituminous coal. The perfect balance between adsorption and transport pores provides 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-30B/R/ENG for more information).

Product Key Features

- High volume activity
- Optimum pore size distribution
- Water washed
- High hardness and abrasion resistance
- Several worldwide drinking water approvals

Benefits

- Combination of high activity and high density
- Both adsorption and transport pores
- High wettability, does not float, low dust
- Proven superior for multiple reactivations
- NSF 61, AWWA B604-96, EN12915, DWI



| PARAMETER | UNIT | VALUE | TEST METHOD |
|--|---------|-------|---------------------|
| Iodine number | mg g⁻¹ | 1050 | ASTM D4607 |
| Surface area | m² g⁻¹ | 1100 | BET N₂ |
| Methylene blue | mg g⁻¹ | 280 | JACOBI T4001 |
| Total pore volume | cm³ g⁻¹ | 1.04 | Porosimetry (N₂/Hg) |
| Apparent density | kg m⁻³ | 470 | ASTM D2854 |
| Bed density, backwashed and drained | kg m⁻³ | 410 | 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 USG) | cm | 2.2 | DIN 19603 |
| Ball-pen hardness number | % | 95 | ASTM D3802 |

| TYPICAL APPLICATIONS |
|---|
| • Municipal drinking water treatment |
| • Residential drinking water treatment |
| • Point of use drinking water treatment |
| • Adsorption of taste and odor |
| • Removal of pesticides and herbicides |
| • Soft drinks production |
| • Protection of ion exchange resins |
| • MEA/DEA purification-gas sweetening |
| • Critical effluent water treatment |

Note 1: Value is based on the backwashing of a bed of AquaSorb® 2000 activated carbon at 30% expansion, which has been allowed to drain and settle.

| PARAMETER | UNIT | 20x40 USG | 12x40 USG | 8x30 USG | 10x20 USG | 8x18 USG | 6x12 USG |
|--------------------------|------|------------|------------|-----------|-----------|-----------|-----------|
| 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 |