TECHNICAL DATASHEET



AddSorb[™] VA3

Activated Carbon for the removal of acid gases

AddSorb[™] VA3 is a performance activated carbon for the combined removal of traces of acid gases such as Hydrogen Sulphide (H₂S), Sulphur Dioxide (SO₂) and Hydrochloric Acid (HCl). This product operates efficiently in atmospheres where a stoichiometric level of oxygen is present to allow chemisorption to occur. Based on a robust activated carbon base material, the manufacturing process of AddSorb[™] VA3 retains an excellent physical resistance to attrition ensuring consistent pressure loss in service. Available in a range of granular size ranges and pellet diameters, AddSorb[™] VA3 can be supplied to meet all pressure loss requirements.



SPECIFICATION*

CTC adsorption (pellet base)	min. 60 %
Total ash content (base)	max. 15 %
Moisture content (product)	max. 15 %
Apparent density (product)	min. 530 kg/m³
Ball pan hardness (base)	min. 95 %
Impregnant level	min. 7 %
Pellet diameter tolerance	max. 10 % ±
Particle size tolerance (granular only)	
Oversize	max. 5 %
Undersize	max. 5 %

TYPICAL PROPERTIES*

CTC adsorption (pellet product)	40 %
CTC adsorption (granular base)	min. 50 %
Apparent density (product)	580 kg/m³

Features and Benefits

- H₂S removal capacity
- Exceptional product hardness
- Rigourosly dedusted
- Clean handling at adsorber loading and commissioning
- Minimal product degradation giving low pressure drop change
- Mercaptan removal capability
- Minimal effect of high relative humidity on performance
- Granular or extruded product

Available Pellet Diameters

- 5 mm diameter
- 4 mm diameter
- 3 mm diameter
- 2 mm diameter

Available Particle Sizes

- 3x6 mesh (6.30 3.35 mm)
- 4x8 mesh (4.75 2.36 mm)
- 6x12 mesh (3.35 1.70 mm)
- 8x16 mesh (2.36 1.18 mm)
- Other particle sizes considered on request

Standard Packaging

- 25 kg PE valve sack (55 lb)
- 500 kg bulk bag (1100 lb)
- Other packing considered on request



Heavy gauge polyethylene valve sacks, stacked 20 sacks per pallet

* SPECIFICATIONS AND TYPICAL PROPERTIES ARE PRODUCED USING JACOBI CARBONS' TEST METHODS. THEY ARE LISTED FOR INFORMATIONAL PURPOSES ONLY AND NOT TO BE USED AS PURCHASE SPECIFICATIONS. SALES SPECIFICATIONS CAN BE OBTAINED FROM YOUR JACOBI CARBONS TECHNICAL SALES REPRESENTATIVE AND SHOULD BE REVIEWED BEFORE PLACING AN ORDER.

TECHNICAL DATASHEET



PRESSURE LOSS IN AIR



Pressure loss data is based on empirical assessment in ambient air (20°C)>80%RH/950-1050mbar) and does not constitut warranty or guarantee of actual performance. a tolerance in particle size is detailed in this technical data sheet and this si be considered in actualiation of potential pressure loss in a treatment system



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TECHNICAL SUPPORT AND KNOW-HOW

One of the distinguishing features of Jacobi Carbons is the extremely high level of technical competence within the company. Stand-alone product and technical service departments are staffed by industryleading specialists in the field of activated carbon application and research. Dedicated laboratory facilities in Europe and North America work with our clients to ensure the optimum result is achieved from the use of our activated carbon products.

PRODUCTION CAPABILITY

The Jacobi Carbons Group of companies owns and operates manufacturing facilities in nine countries around the world. We produce in excess of 70,000 metric tonnes of high quality activated carbons based on coconut shell, coal and wood, by both chemical and steam (physical) activation methods. Our facilities are state-of-the-art, and are the most modern production units of their type. Intensive investment in these has ensured that products are manufactured to the most exacting quality standards demanded by our customers.

CARBON PERFORMANCE DATA

H S removal capacity

Test method	ASTM D6646-01	
H ₂ S concentration (inlet)	1 % v/v (10 000 ppmv)	
H ₂ S concentration (breakthrough)	50 ppmv	
Efficiency at breakthrough	99.5 %	
Flow rate	1450 cm³/min.	
Carbon volume	116 mL	
Carbon depth	approx. 22.9 cm	
Contact time	approx. 4.8 s	
Relative humidity	80 %	
Temperature	25 °C	
AddSorb TM VA3 capacity for H_2S	>0.15 g/cm ³ (approx. 25 % w/w [†])	

Adsorption capacity expressed on w/w basis calculated with 58 kg/m³ apparent density of product.

Capacity stated does not constitute a warranty or guarantee of actual performance. Actual adsorption capacity for pollutants may vary relative to the operating conditions and design of filtration unit in which the product is used.



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