



TECHNISCHE  
UNIVERSITÄT  
DRESDEN

ACS-1

activated carbon spheres

Highly Porous  
Spherical Carbon

Information, quantities and prices:

Materials Center

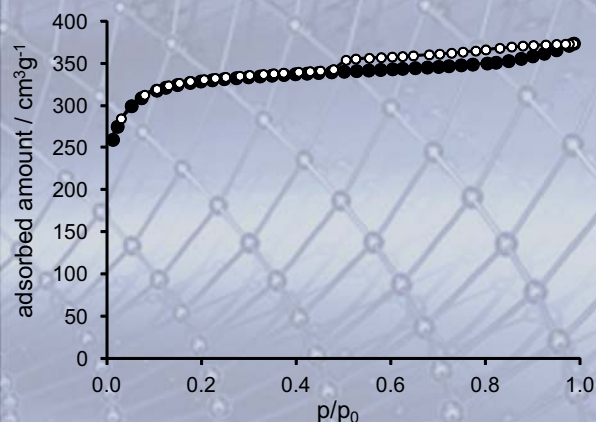
Phone: +49 351 463 - 32021  
Fax: +49 351 463 - 37287  
materials.center@chemie.tu-dresden.de

[http://www.chm.tu-dresden.de/ac1/materials\\_center/](http://www.chm.tu-dresden.de/ac1/materials_center/)

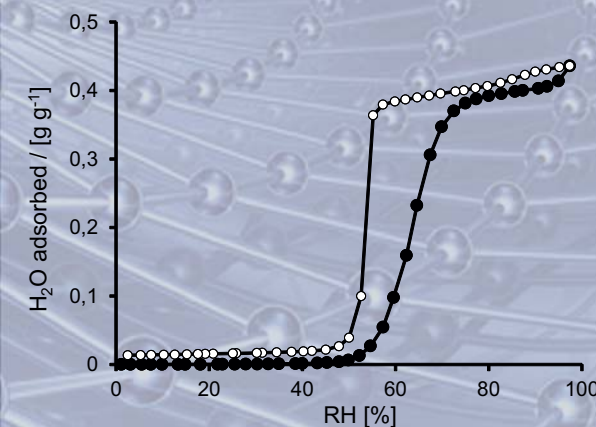
TU Dresden  
Department of Chemistry and Food Chemistry  
Inorganic Chemistry I  
01062 Dresden

## Adsorption Data

**N<sub>2</sub>-Adsorption Isotherm (77 K):**



**H<sub>2</sub>O-Adsorption Isotherm (238 K):**



ACS-1 is a spherical high performance carbon material with high hydrophobicity, porosity and mechanical strength.

It is suitable for applications in separation and purification, like the removal of VOCs (volatile organic compounds) but also as a BET reference material or catalyst support.

## Chemical Data

### Chemical Composition:

C (M<sub>w</sub> = 12.01 g mol<sup>-1</sup>)

Min./Max. Quantity: 1 gram / 1 kg

### Air and Moisture Sensitivity:

stable in air and against water

Colour: black

Sphere Size: 400 µm

Specific Surface Area (p/p<sub>0</sub> = 0,3):

1020 m<sup>2</sup>g<sup>-1</sup> (Single Point BET, p/p<sub>0</sub>=0,3)

Specific Pore Volume (p/p<sub>0</sub> = 0,98):

0.58 cm<sup>3</sup>g<sup>-1</sup>

## Photograph

