



MCM-48

cubic mesoporous SiO_2

Chemical Data

Chemical composition:
 SiO_2 ($M_w = 60.1 \text{ g mol}^{-1}$)

Min./Max. quantity: 1 gram
10 grams

Air and moisture sensitivity:
stable under hydrothermal conditions

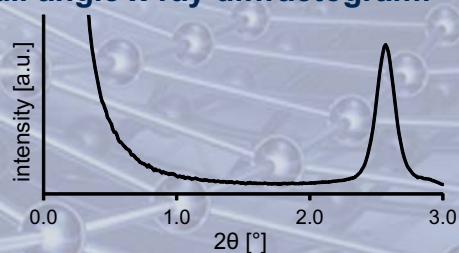
Colour: colorless

Pore size: 3-4 nm

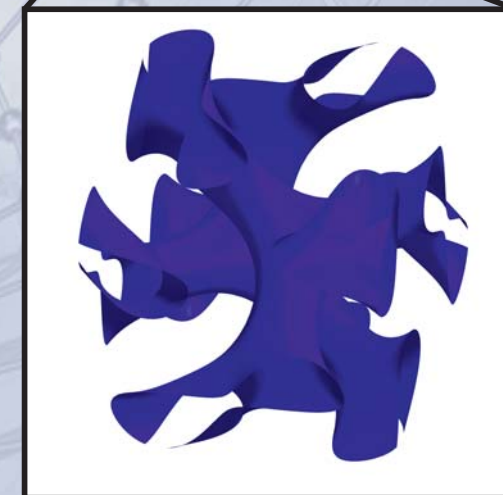
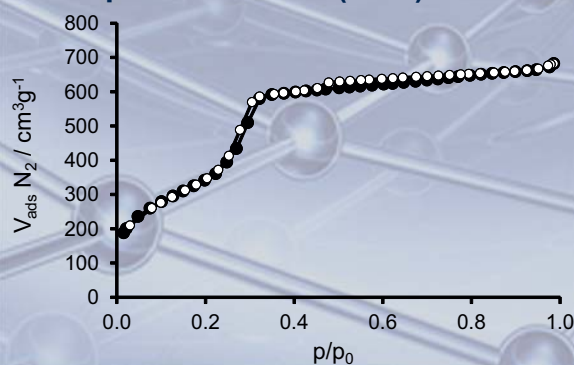
Single point BET ($p/p_0 = 0,3$):
 $\sim 1500 \text{ m}^2\text{g}^{-1}$

Specific pore volume ($p/p_0 = 0,9$):
 $\sim 1.1 \text{ cm}^3\text{g}^{-1}$

Small angle x-ray diffractogram:



Adsorption isotherm (77 K):



Information, quantities and prices:

Materials Center

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http://www.chm.tu-dresden.de/ac1/materials_center/

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Literature

J. C. Vartuli, K. D. Schmitt, C. T. Kresge, W. J. Roth, M. E. Leonowicz, S. B. McCullen, S. D. Hellring, J. S. Beck, J. L. Schlenker, *Chem. Mater.* **1994**, *6*, 2317–2326.