



## MCM-41

hexagonal mesoporous  $\text{SiO}_2$

### Chemical Data

**Chemical composition:**  
 $\text{SiO}_2$  ( $M_w = 60.1 \text{ g mol}^{-1}$ )

**Min./Max. quantity:** 1 gram  
10 grams

**Air and moisture sensitivity:**  
stable under hydrothermal conditions

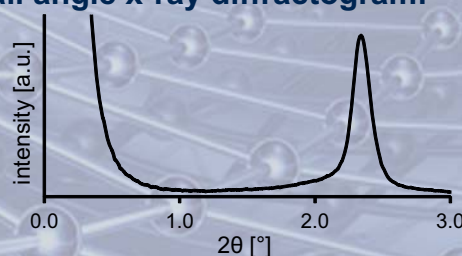
**Colour:** colorless

**Pore size:** 2-3 nm

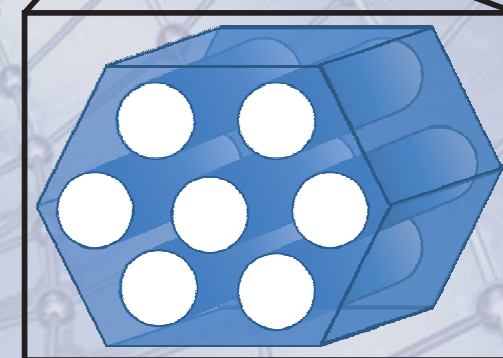
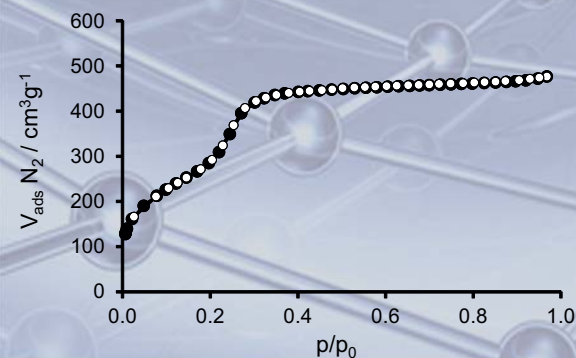
**Single point BET ( $p/p_0 = 0,3$ ):**  
 $\sim 1200 \text{ m}^2\text{g}^{-1}$

**Specific pore volume ( $p/p_0 = 0,9$ ):**  
 $\sim 0.7 \text{ cm}^3\text{g}^{-1}$

**Small angle x-ray diffractogram:**



**Adsorption isotherm (77 K):**



Information, quantities and prices:

Materials Center

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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/)

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### Literature

C. T. Kresge, M. E. Leonowicz, W. J. Roth, J. C. Vartuli, J. S. Beck, *Nature* **1992**, 359, 710-712.