TECHNISCHE UNIVERSITÄT DRESDEN

FeBTC

$Fe_3O(btc)_2NO_3$

spherical iron(III)-trimesate adsorbents

Highly Porous Metal-Organic Framework

Information, quantities and prices:

Materials Center

Phone: +49 351 463 - 34864
Fax: +49 351 463 - 37287
materials.center@chemie.tu-dresden.de

www.metal-organic-frameworks.eu

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

Chemical Data

Chemical composition:

$Fe_3C_{18}H_6O_{16}N$ (M_W = 659.8 g mol^{-1})

Min./Max. quantity: 1 - 100 g

Air and moisture sensitivity:

stable against moisture
stable in air up to 250 °C

Colour: light to dark brown (Xerogel)
orange to light brown (Aerogel)

Particle size: 0.5 - 2.0 mm (Xerogel)
1.0 - 5.0 mm (Aerogel)

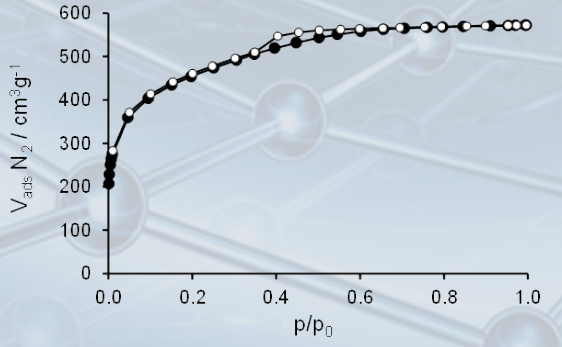
Single point BET (p/p_0 = 0.3):

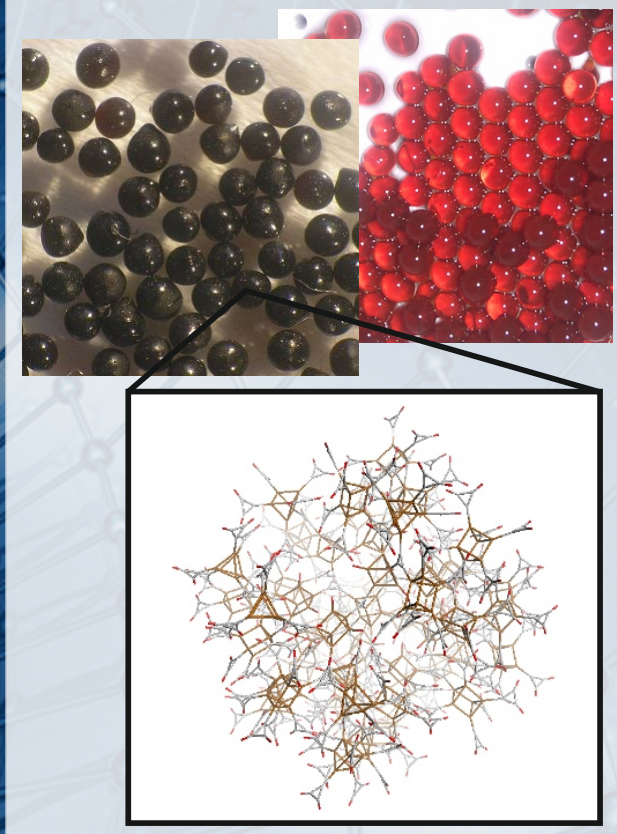
800 - 1300 m^2g^{-1} (Xerogel)
1300 - 1600 m^2g^{-1} (Aerogel)

Specific pore volume (p/p_0 = 0.9):

0.6 cm^3g^{-1} (Xerogel), 0.8 cm^3g^{-1} (Aerogel)

Adsorption isotherm:





Literature

M. R. Lohe, S. Kaskel, M. Rose, I. Senkovska, WO 2012156436, **2012**.

M. R. Lohe, M. Rose, S. Kaskel, *Chem. Commun.* **2009**, 6056 - 6058.