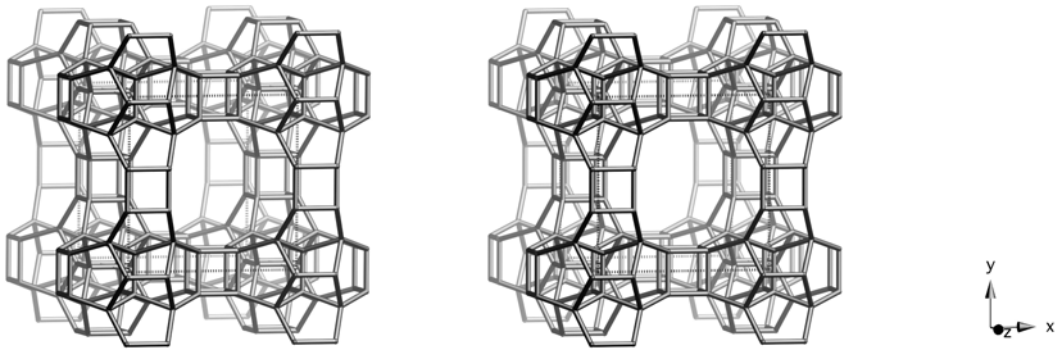
BEC

$P4_2/mmc$

Framework Type Data



framework viewed along [001]

Idealized cell data: tetragonal, $P4_2/mmc$, a = 12.8Å, c = 13.0Å

Coordination sequences and vertex symbols:

T_1(16,1)	4	9	18	32	50	71	96	129	167	199	$4{\cdot}5{\cdot}4{\cdot}6{\cdot}4{\cdot}12_6$
T_2(8,2)	4	12	17	30	48	71	98	126	156	198	$5{\cdot}5{\cdot}5_2{\cdot}12_5{\cdot}6{\cdot}6$
T_3(8,*m*)	4	11	20	28	41	70	103	127	150	188	$4{\cdot}5_2{\cdot}5{\cdot}6{\cdot}5{\cdot}6$

Secondary building units: 6-2

Composite building units:

d4r *mor* *mtw*

Materials with this framework type:

*FOS-5 (Beta polymorph C)[1]
ITQ-14 overgrowth[2]
ITQ-17[3]

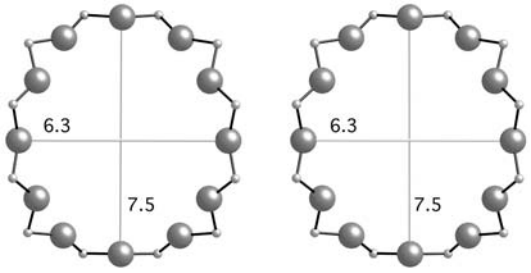
Type Material: FOS-5 (Beta polymorph C) **BEC**

Type Material Data

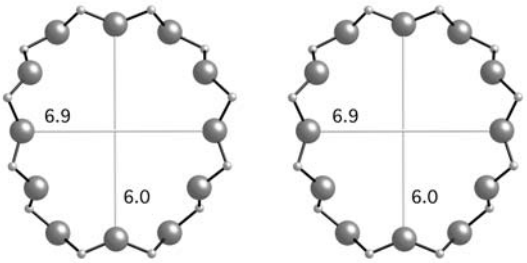
Crystal chemical data: $|(C_3H_9N)_{48}\ (H_2O)_{36}|\ [Ge_{256}O_{512}]$-**BEC**
tetragonal, $I4_1/amd$, a = 25.990Å, c = 27.271Å [(1)]
(Relationship to unit cell of Framework Type: $a' = 2a$, $c' = 2c$)

Framework density: 13.9 T/1000Å^3

Channels: [001] **12** 6.3 x 7.5* ↔ <100> **12** 6.0 x 6.9**



12-ring viewed along [001]



12-ring viewed along [100]

References:

(1) Conradsson, T., Dadachov, M.S. and Zou, X.D. *Microporous Mesoporous Mat.*, **41**, 183-191 (2000)
(2) Liu, Z., Ohsuna, T., Terasaki, O., Camblor, M.A., Diaz-Cabañas, M.-J. and Hiraga, K. *J. Am. Chem. Soc.*, **123**, 5370-5371 (2001)
(3) Corma, A., Navarro, M.T., Rey, F., Rius, J. and Valencia, S. *Angew. Chem., Int. Ed.*, **40**, 2277-2280 (2001)