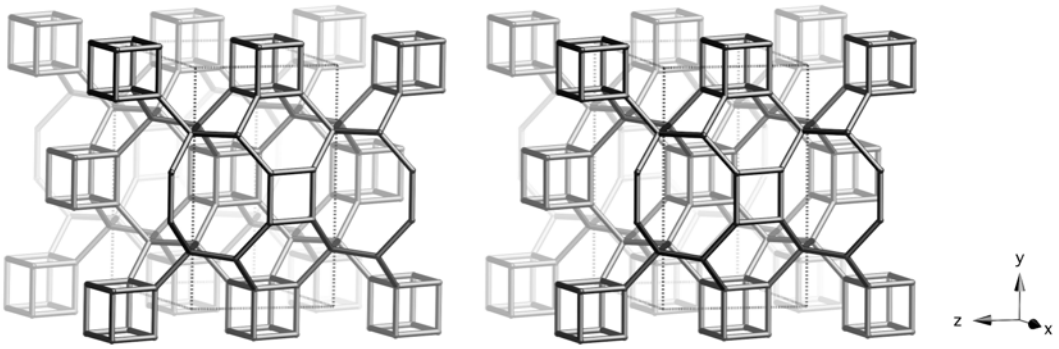
ITW

C2/m

Framework Type Data



framework viewed along [100]

Idealized cell data: monoclinic, *C*2/*m*, *a* = 10.4, *b* = 15.0, *c* = 9.0, β = 105.6

Coordination sequences and vertex symbols:

T_1 (8,1)	4	12	23	36	56	87	121	149	181	231	288	337	$5{\cdot}5{\cdot}5{\cdot}6{\cdot}8{\cdot}8$
T_2 (8,1)	4	9	19	38	61	83	110	149	194	234	274	329	$4{\cdot}5{\cdot}4{\cdot}6{\cdot}4{\cdot}8_2$
T_3 (8,1)	4	9	19	38	62	82	108	152	197	229	269	338	$4{\cdot}5{\cdot}4{\cdot}6{\cdot}4{\cdot}8_2$

Secondary building units: 1-4-1 or 4-[1,1]

Composite building units:

d4r

Materials with this framework type:

*ITQ-12[1,2]

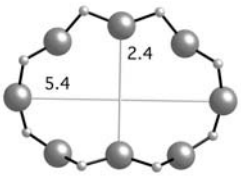
Type Material: ITQ-12 ITW

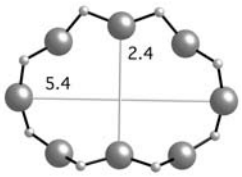
Type Material Data

Crystal chemical data: $[Si_{24}O_{48}]$-**ITW**
monoclinic, *Cm*
a = 10.3304Å, *b* = 15.010Å, *c* = 8.860Å, β = 105.34° (1)

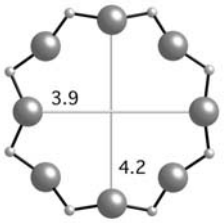
Framework density: 18.1 T/1000Å^3

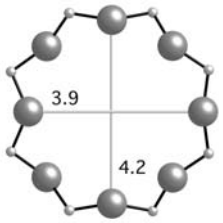
Channels: [100] **8** 2.4 x 5.4* ↔ [001] **8** 3.9 x 4.2*





8-ring viewed along [100]





8-ring viewed along [001]

References:

(1) Barrett, P.A., Boix, T., Puche, M., Olson, D.H., Jordan, E., Koller, H. and Camblor, M.A *Chem. Commun.*, 2114-2115 (2003)

(2) Yang, X.B., Camblor, M.A., Lee, Y., Liu, H.M. and Olson, D.H. *J. Am. Chem. Soc.*, **126**, 10403-10409 (2004)