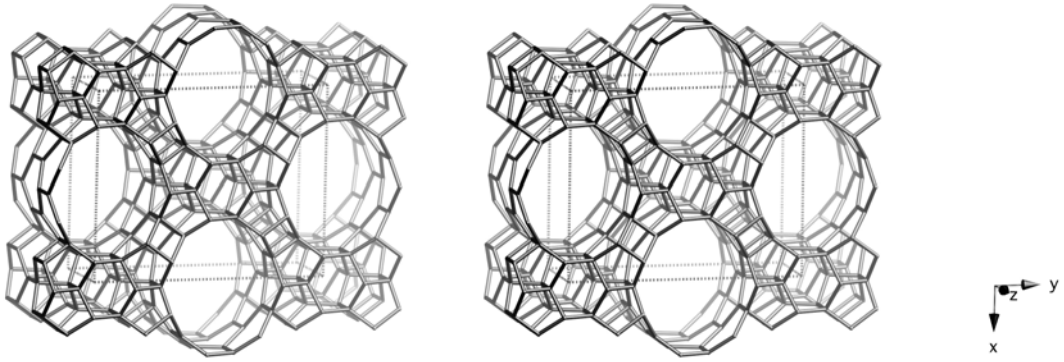
DON *Cmcm*

Framework Type Data



framework viewed along [001]

Idealized cell data: orthorhombic, *Cmcm*, a = 18.9Å, b = 23.4Å, c = 8.5Å

Coordination sequences and vertex symbols:

T_1 (16,1)	4	10	20	34	54	77	107	140	175	218	$4\cdot6\cdot4\cdot6_2\cdot5\cdot6$
T_2 (16,1)	4	10	20	35	54	77	106	138	177	221	$4\cdot6\cdot4\cdot6_2\cdot5\cdot6$
T_3 (16,1)	4	12	24	38	55	76	105	143	184	223	$5\cdot6_2\cdot6\cdot6_2\cdot6\cdot6_2$
T_4 (8,*m*)	4	12	22	33	53	80	109	143	179	217	$5\cdot6\cdot5\cdot6\cdot6\cdot6_2$
T_5 (8,*m*)	4	12	23	37	52	74	107	143	183	223	$5\cdot6_2\cdot5\cdot6_2\cdot6_2\cdot6_2$

Secondary building units: 5-3

Composite building units:

dcc	*afi*	*mel*
double crankshaft chain		

Materials with this framework type:

*UTD-1F[1]
UTD-1[2]

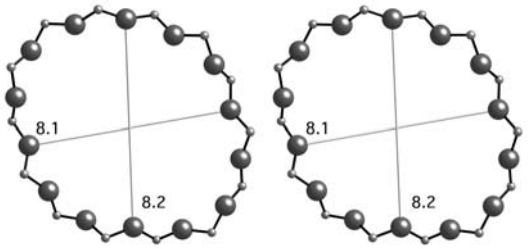
Type Material: UTD-1F — DON

Type Material Data

Crystal chemical data: l((Cp*)$_2$Co)$_2$ $F_{1.5}(OH)_{0.5}$l [$Si_{64}O_{128}$]-**DON**
Cp* = pentamethylcyclopentadiene
monoclinic, *Pc*
a = 14.970Å, *b* = 8.476Å, *c* = 30.028Å, β = 102.65° (1)
(Relationship to unit cell of Framework Type:
a' = *a*/(2sinβ'), *b*' = *c*, *c*' = √(a^2+c^2)
or, as vectors, **a**' = (**a** - **b**)/2, **b**' = **c**, **c**' = **a** + **b**)

Framework density: 17.2 T/1000Å^3

Channels: [010] **14** 8.1 x 8.2*



14-ring viewed along [010]

References:

(1) Wessels, T., Baerlocher, C., McCusker, L.B. and Creyghton, E.J. *J. Am. Chem. Soc.*, **121**, 6242-6247 (1999)
(2) Lobo, R.F., Tsapatsis, M., Freyhardt, C.C., Khodabandeh, S., Wagner, P., Chen, C.Y., Balkus, K.J., Zones, S.I. and Davis, M.E. *J. Am. Chem. Soc.*, **119**, 8474-8484 (1997)