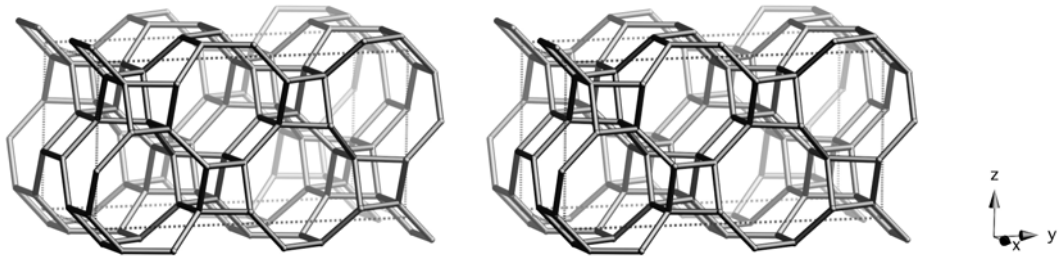
APD

Cmce

Framework Type Data



framework viewed along [100]

Idealized cell data: orthorhombic, *Cmce*, a = 8.7Å, b = 20.1Å, c = 10.2Å

Coordination sequences and vertex symbols:

T_1 (16,1)	4	10	21	37	57	82	112	145	184	228	$4\cdot4\cdot6_2\cdot8_3\cdot6_3\cdot8_3$
T_2 (16,1)	4	11	22	38	59	83	113	147	186	230	$4\cdot6_2\cdot6\cdot6_2\cdot6\cdot6_3$

Secondary building units: 8 or 6-2 or 4

Composite building units:

nsc
narsarsukite
chain

Materials with this framework type:

*AlPO-D[(1)]
APO-CJ3[(2)]

Type Material: AlPO-D

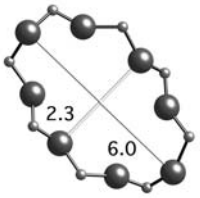
APD

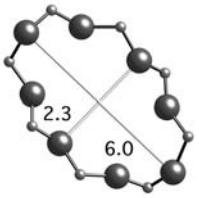
Type Material Data

Crystal chemical data: **[**$Al_{16}P_{16}O_{64}$**]-APD**
(forms irreversibly from AlPO-C at around 200°C)
orthorhombic, *Pca*2_1, a = 19.187Å, b = 8.576Å, c = 9.804Å [(1)]
(Relationship to unit cell of Framework Type: $a' = b$, $b' = a$, $c' = c$)

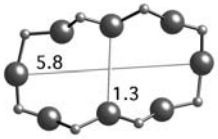
Framework density: 19.8 T/1000Å^3

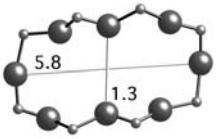
Channels: [010] **8** 2.3 x 6.0* ↔ [201] **8** 1.3 x 5.8*





distorted 8-ring viewed along [010]





distorted 8-ring along [201]

References:

(1) Keller, E.B., Meier, W.M. and Kirchner, R.M. *Solid State Ionics*, **43**, 93-102 (1990)

(2) Wang, K.X., Yu, J.H., Zhu, G.S., Zou, Y.C. and Xu, R.R. *Microporous Mesoporous Mat.*, **39**, 281-289 (2000)