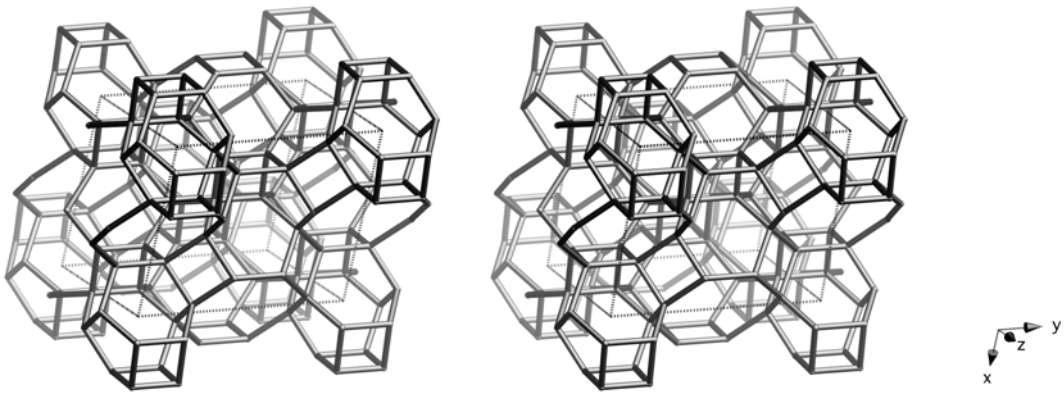
RUT

C*2/*m

Framework Type Data



framework viewed along [001]

Idealized cell data: monoclinic, *C*2/*m*, *a* = 13.2Å, *b* = 13.3Å, *c* = 12.5Å, β = 114.8°

Coordination sequences and vertex symbols:

T_1 (8,1)	4	10	21	37	58	87	116	146	185	232	4·4·5·6·5·8
T_2 (8,1)	4	10	21	38	60	84	113	148	192	232	4·5·4·6·5·6
T_3 (8,1)	4	11	23	38	58	86	114	148	189	234	4·5·5·6·6·6
T_4 (8,1)	4	11	21	37	62	85	114	148	185	232	4·5·5·5·6·8
T_5 (4,2)	4	12	22	40	58	82	116	154	186	232	5·5·6·6·6·6

Secondary building units: 6

Composite building units:

rte

Materials with this framework type:

*RUB-10[1]
[TMA-[Si-O]-**RUT**[2]
Al-Nu-1[3]
B-Nu-1[3]
Fe-Nu-1[3]
Ga-Nu-1[3]
Nu-1[4]

Type Material: RUB-10 RUT

Type Material Data

Crystal chemical data: $|(C_4H_{12}N)_4|[B_4Si_{32}O_{72}]$-**RUT**
$C_4H_{12}N$ = tetramethylammonium
monoclinic, $P2_1/a$
a = 13.112Å, b = 12.903Å, c = 12.407Å, β = 113.50° (1)

Framework density: 18.7 T/1000Å^3

Channels: apertures formed by 6-rings only

References:
(1) Gies, H. and Rius, J. *Z. Kristallogr.*, **210**, 475-480 (1995)
(2) Broach, R.W., McGuire, N.K., Chao, C.C. and Kirchner, R.M. *J. Phys. Chem. Solids*, **56**, 1363-1368 (1995)
(3) Bellussi, G., Millini, R., Carati, A., Maddinelli, G. and Gervasini, A. *Zeolites*, **10**, 642-649 (1990)
(4) Whittam, T.V. and Youll, B. *U.S. Patent 4,060,590* (1977)