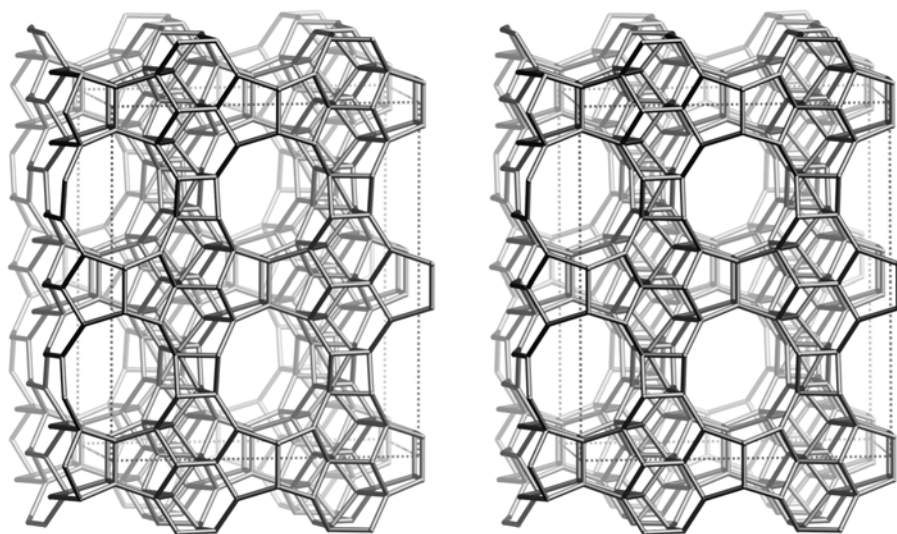


Framework Type Data



framework viewed along [010]

Idealized cell data: orthorhombic, *Fmmm*, $a = 26.1\text{\AA}$, $b = 13.9\text{\AA}$, $c = 22.9\text{\AA}$

Coordination sequences and vertex symbols:

T ₁ (32,1)	4	11	21	36	58	89	123	157	187	237	4·6·5·5·5 ₂ ·10
T ₂ (32,1)	4	12	22	38	57	86	118	152	196	245	5·5·5·6 ₂ ·5·10
T ₃ (16, <i>m</i>)	4	12	20	34	57	88	125	158	192	224	5·5 ₂ ·5·5 ₂ ·12 ₂ ·*
T ₄ (16, <i>m</i>)	4	12	20	31	57	84	118	150	187	237	5·5·5·5·5·6 ₂
T ₅ (16, <i>m</i>)	4	11	24	40	63	86	114	158	208	255	4·10·5·5·5·5
T ₆ (16, <i>m</i>)	4	12	22	35	55	83	119	151	184	237	5·5 ₂ ·5·6·5·6
T ₇ (8, <i>mm</i> 2)	4	12	24	32	50	88	120	152	180	226	5·5·5·5·12 ₆ ·*

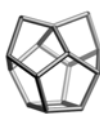
Secondary building units: see *Compendium*

Composite building units:

cas



non



ton



Materials with this framework type:

*NU-87⁽¹⁾

Gottardiite⁽²⁾

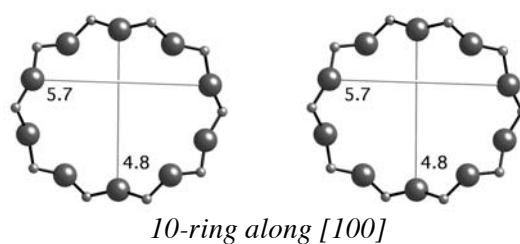
Type Material: NU-87

Type Material Data

Crystal chemical data: $[\text{H}_4(\text{H}_2\text{O})_n] [\text{Al}_4\text{Si}_{64}\text{O}_{136}]$ -NES
 monoclinic, $P2_1/c$
 $a = 14.324\text{\AA}$, $b = 22.376\text{\AA}$, $c = 25.092\text{\AA}$, $\beta = 151.51^\circ$ ⁽¹⁾
 (Relationship to unit cell of Framework Type:
 $a' = b/(2\sin\beta')$, $b' = c$, $c' = a$
 or, as vectors, $\mathbf{a}' = (\mathbf{b} - \mathbf{a})/2$, $\mathbf{b}' = \mathbf{c}$, $\mathbf{c}' = \mathbf{a}$)

Framework density: $17.7 \text{ T}/1000\text{\AA}^3$

Channels: $[100]$ **10** $4.8 \times 5.7^{**}$

**References:**

- (1) Shannon, M.D., Casci, J.L., Cox, P.A. and Andrews, S.J. *Nature*, **353**, 417-420 (1991)
- (2) Alberti, A., Vezzalini, G., Galli, E. and Quartieri, S. *Eur. J. Mineral.*, **8**, 69-75 (1996)