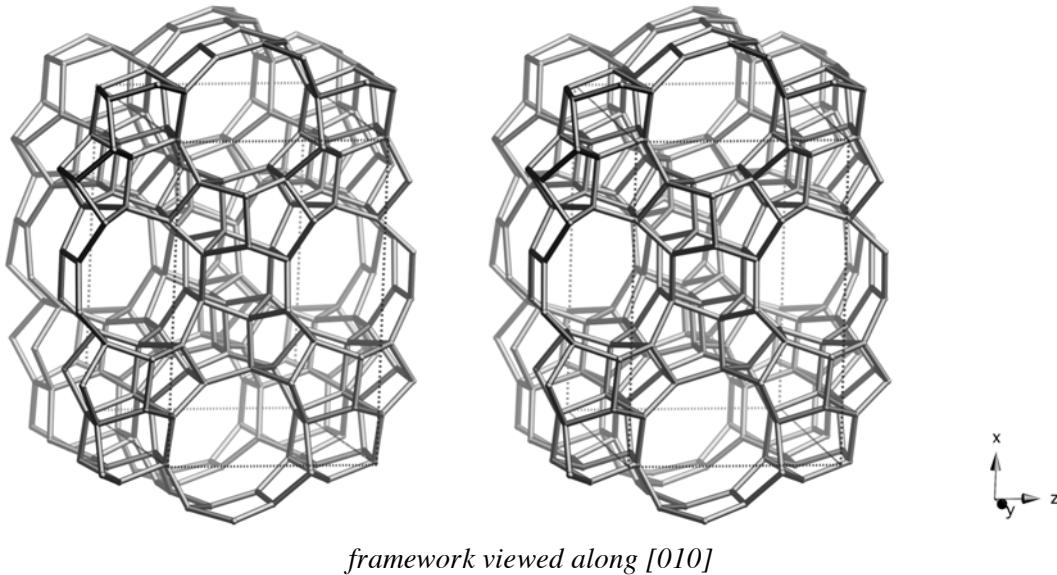


**MFI***Pnma*

## Framework Type Data



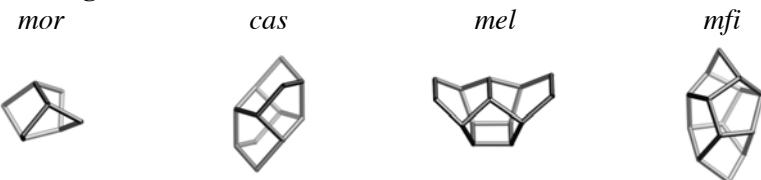
**Idealized cell data:** orthorhombic, *Pnma*,  $a = 20.1\text{\AA}$ ,  $b = 19.7\text{\AA}$ ,  $c = 13.1\text{\AA}$

**Coordination sequences and vertex symbols:**

see Appendix A for a list of the coordination sequences and vertex symbols for the 12 T-atoms

**Secondary building units:** 5-1

**Composite building units:**



**Materials with this framework type:**

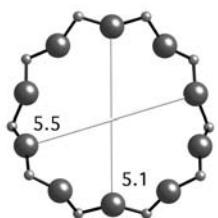
*ZSM-5 <sup>(1-3)</sup>	FZ-1 <sup>(12)</sup>	TSZ-III <sup>(21)</sup>
[As-Si-O]-MFI <sup>(4)</sup>	LZ-105 <sup>(13)</sup>	TZ-01 <sup>(22)</sup>
[Fe-Si-O]-MFI <sup>(5)</sup>	Monoclinic H-ZSM-5 <sup>(14)</sup>	USC-4 <sup>(23)</sup>
[Ga-Si-O]-MFI <sup>(6)</sup>	Mutinaite <sup>(15)</sup>	USI-108 <sup>(24)</sup>
AMS-1B <sup>(7)</sup>	NU-4 <sup>(16)</sup>	ZBH <sup>(25)</sup>
AZ-1 <sup>(8)</sup>	NU-5 <sup>(17)</sup>	ZKQ-1B <sup>(26)</sup>
Bor-C <sup>(9)</sup>	Silicalite <sup>(18)</sup>	ZMQ-TB <sup>(27)</sup>
Boralite C <sup>(10)</sup>	TS-1 <sup>(19)</sup>	organic-free ZSM-5 <sup>(28)</sup>
Encilite <sup>(11)</sup>	TSZ <sup>(20)</sup>	

**Type Material: ZSM-5****Type Material Data**

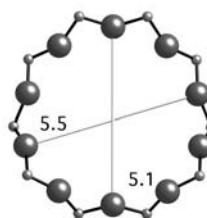
**Crystal chemical data:**  $\text{Na}_n (\text{H}_2\text{O})_{16} [\text{Al}_n \text{Si}_{96-n} \text{O}_{192}]$ -MFI,  $n < 27$   
orthorhombic,  $Pnma$ ,  $a = 20.07\text{\AA}$ ,  $b = 19.92\text{\AA}$ ,  $c = 13.42\text{\AA}$ <sup>(2)</sup>

**Framework density:**  $17.9 \text{ T}/1000\text{\AA}^3$

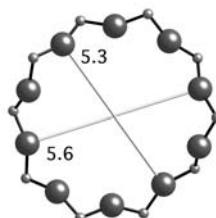
**Channels:**  $\{[\text{100}] \textbf{10} 5.1 \times 5.5 \leftrightarrow [\text{010}] \textbf{10} 5.3 \times 5.6\}^{***}$



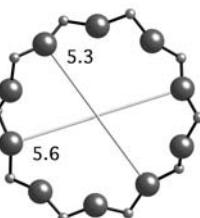
10-ring viewed along [100]



10-ring viewed along [100]



10-ring viewed along [010]

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