

substance: WO_3

property: structural and related data of $\alpha\text{-WO}_3$

space group $\text{Pc} - \text{C}_s^2$, $Z = 4$. Coordination about W almost 5-fold, with zig-zag W strings.

lattice parameters

a	5.275 Å	$T = 133\text{K}$	76S
b	5.155 Å		
c	7.672 Å		
β	91.7°		
$d(\text{W-O})$	1.85 Å	W-O distance in a - b plane;	
	2.31 Å	long sixth distance, see Fig. 1	

References:

76S Salje, E.: Ferroelectrics 12 (1976) 215.

Fig. 1.

α -WO₃. Structure at -70°C [76S].

