

substance: VO₂

property: coefficient of linear thermal expansion

(in 10⁻⁶ K⁻¹)

α_{11}	12.11	$T = 298...334$ K	1, 2 and 3 are the three monoclinic axes $\alpha_{ij} = (1/2\Delta t)(du_i/dx_j + du_j/dx_i)$ where u_i is the strain in the i th direction	79K
α_{22}	1.22			
α_{33}	2.57			
α_{13}	- 5.43			
α_{av}	5.70			
α_{11}	4.87	$T = 339...360$ K	for $T > T_{tr}$; 1, 3 refer to the a and c -axes of the rutile structure	79K
α_{33}	30.48			
α_{av}	13.35			
α_{av}	6.4	$T = 290...335$ K		64K
α_{av}	17.1	$T = 459...470$ K		64K
α_{11}	5.22...3.95	$T = 373...753$ K		67R
α_{33}	26.96...22.37			
α_{av}	12.97			
α_{11}	3.5	$T = 360...573$ K		74M
α_{33}	29.3			
α_{av}	10.4			
α_{11}	$5.828 \cdot 10^{-6} - 7.091 \cdot 10^{-9}(T-273) + 6.946 \cdot 10^{-12}(T-273)^2$ [K ⁻¹]			67R
α_{33}	$29.683 \cdot 10^{-6} - 2.930 \cdot 10^{-8}(T-273) + 2.576 \cdot 10^{-11}(T-273)^2$ [K ⁻¹] for the high-temperature phase (T in K)			

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