

substance: TcS₂

property: crystal structure, physical properties

(S: structure (space group), CG: crystal growth (the numbers in parentheses correspond to T_1 and T_2 , the temperatures (in °C) of the hot and cold end of the crystal growth tube, respectively)).

lattice parameters

a	6.415 Å	S: triclinic, primitive (unspecified) CG: halogen transport (1150/1080)	71W
b	6.375 Å		
c	6.659 Å		
α	103.61°		
β	62.97°		
γ	118.96°		

density

d	5.066 g cm ⁻³	calculated
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energy gap

E_g	1.0 eV	synthetic single crystal	optical gap
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References:

71W Wildervanck, J. C., Jellinek, F.: J. Less-Common Met 24 (1971) 73.