

Table 1. COMPOSITION AND DIMENSIONS OF PHASES IN THE MOLYBDENUM-CARBON SYSTEM

Com- position	Symbol	Structure	X-ray data			Molybdenum atoms/unit cell
			$a_0(\text{\AA})$	$c_0(\text{\AA})$	c_0/a_0	
Mo ₆ C	β	hexagonal closest packing	3.002	4.724	1.574	2
MoC	γ	hexagonal	2.808	2.809	0.969	1
MoC	γ'	hexagonal	2.932	10.97	3.742	4
MoC	η	complex hexagonal closest packing	3.00	14.58	4.86	6
MoC	α	face-centred cubic (sod- ium chlor- ide)	4.27	—	—	4

This work was sponsored by the Metals and Ceramics Laboratory, Materials Centre, Wright Air Development Division, Air Research and Development Command, United States Air Force.

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¹ Clark, jun., S. P., *Conference on Very High Pressure* (J. Wiley and Sons, New York, 1961).

² Robertson, E. C., Birch, F., and MacDonald, G. J. F., *Amer. J. Sci.*, **255**, 115 (1957).

³ Clark, jun., S. P., Robertson, E. C., and Birch, F., *Amer. J. Sci.*, **255**, 628 (1957).

⁴ Bovenkerk, H. P., *et al.*, *Nature*, **184**, 1004 (1959).

⁵ Coes, jun., L., *Science*, **118**, 131 (1953).

⁶ Wentorf, jun., R. H., *J. Chem. Phys.*, **26**, 956 (1957); *Conference on Very High Pressure* (J. Wiley and Sons, New York, 1961).

⁷ Bridgman, P. W., *The Physics of High Pressure* (G. Bell and Sons, Ltd., London, 1952). Kaufman, J., in *Solids under Pressure* (McGraw-Hill Book Co., New York, 1962).

⁸ Pearson, W. B., *A Handbook of Lattice Spacings and Structures of Metals and Alloys* (Pergamon Press, London, 1958).