

## Am – S (Americium – Sulfur)

### Crystal structure

Three intermediate phases have been found in this system, the crystal data of which are shown in Table 1.

**Table 1. Am–S.** Crystal structure of intermediate phases (taken from [Massalski] and [Pearson]).

Phase	Structure	Prototype	Lattice parameters [nm]	
			<i>a</i>	<i>c</i>
AmS	cub	NaCl	0.5592	0.7981
AmS <sub>2</sub>	tet	Cu <sub>2</sub> Sb	0.3938	
Am <sub>2</sub> S <sub>3</sub>	cub	P <sub>4</sub> Th <sub>5</sub>	0.84344	

### References

- [Massalski] Massalski, T.B., (ed.): “Binary Alloy Phase Diagrams”, Second Edition, The Materials Information Society, ASM International, Materials Park, Ohio (1992)
- [Pearson] Pearson, W.B.: “Handbook of Lattice Spacings and Structure of Metals and Alloys”, Pergamon Press, New York, (1958), Vol. 1, (1967) Vol. 2