

## As – Ba (Arsenic – Barium)

### Crystal structure

The crystallographic data of intermediate phases are given in Table 1.

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

Phase	Structure	Prototype	Lattice parameters [nm]		
			<i>a</i>	<i>b</i>	<i>c</i>
As <sub>14</sub> Ba <sub>3</sub>	mon	As <sub>14</sub> Ba <sub>3</sub>	0.6854	1.3639	1.2136
As <sub>3</sub> Ba	mon	BaP <sub>3</sub>	1.0162	$\beta = 124.26^\circ$ 0.7760	0.6015
As <sub>2</sub> Ba <sub>3</sub>				$\beta = 113.55^\circ$	
As <sub>3</sub> Ba <sub>5</sub>	hex	Mn <sub>5</sub> Si <sub>3</sub>	0.949		0.790
AsBa <sub>2</sub>	tet	La <sub>2</sub> Sb	0.513		1.736

### 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