

hexagonal graphite

The thermodynamically stable form of *graphite* with an ABAB stacking sequence of the *graphene layers*. The exact crystallographic description of this allotropic form is given by the space group d_{6h}^4 -*P63/mmc* (unit cell constants: $a = 245.6$ pm, $c = 670.8$ pm). Hexagonal graphite is thermodynamically stable below approximately 2600 K and 6 GPa.

Note:

The use of the term graphite instead of the more exact term hexagonal graphite may be tolerated in view of the minor importance of *rhombohedral graphite*, the other allotropic form.

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