

non-graphitic carbon

All varieties of solids consisting mainly of the element carbon with two-dimensional long-range order of the carbon atoms in planar hexagonal networks, but without any measurable crystallographic order in the third direction (*c*-direction) apart from more or less parallel stacking.

Note:

Some varieties of non-graphitic carbon convert on heat treatment to graphitic carbon (graphitizable carbon) but some others do not (non-graphitizable carbon).

See also: amorphous carbon

Source:

PAC, 1995, 67, 473 (*Recommended terminology for the description of carbon as a solid (IUPAC Recommendations 1995)*) on page 498