

synthetic graphite

A material consisting of graphitic carbon which has been obtained by graphitizing of non-graphitic carbon by chemical vapour deposition (CVD) from hydrocarbons at temperatures above 2500 K, by decomposition of thermally unstable carbides or by crystallizing from metal melts supersaturated with carbon.

Note:

The term artificial graphite is often used as a synonym for synthetic graphite. The term synthetic graphite is preferred, however, since graphite crystals can be considered to consist of carbon macromolecules. Although the term synthetic graphite also covers the CVD product pyrolytic graphite as well as the residues of carbide decomposition, it is predominantly used for graphitized carbon. Such common use is in line with the above definition. Synonyms for this most important type of synthetic graphite are Acheson graphite and electrographite.

Source:

PAC, 1995, 67, 473 (*Recommended terminology for the description of carbon as a solid (IUPAC Recommendations 1995)*) on page 505