

exfoliated graphite

The product of very rapid heating (or flash heating) of graphite intercalation compounds, such as graphite hydrogensulfate of relatively large particle diameter (flakes). The vaporizing intercalated substances force the graphite layers apart. The exfoliated graphite assumes an accordion-like shape with an apparent volume often hundreds of times that of the original graphite flakes.

Note:

Exfoliated graphite is usually prepared from well-crystallized natural flake graphite. It is used for the production of graphite foils. Exfoliated graphite is different from the deflagration product of graphite oxide (graphitic acid).

Source:

PAC, 1995, 67, 473 (*Recommended terminology for the description of carbon as a solid (IUPAC Recommendations 1995)*) on page 488