

carbon black

An industrially manufactured colloidal carbon material in the form of spheres and of their fused aggregates with sizes below 1000 nm.

Note:

Carbon black is a commercial product manufactured by thermal decomposition, including detonation, or by incomplete combustion of carbon hydrogen compounds and has a well-defined morphology with a minimum content of tars or other extraneous materials. For historical reasons, however, carbon black is popularly but incorrectly regarded as a form of soot. In fact, in many languages, the same word is used to designate both materials. Carbon black is manufactured under controlled conditions, whereas soot is randomly formed. They can be distinguished on the basis of tar, ash content and impurities. Attempts in the literature to create a general term, 'aciniform carbon', which would cover both carbon black and soot, are not yet generally accepted.

Source:

PAC, 1995, 67, 473 (*Recommended terminology for the description of carbon as a solid (IUPAC Recommendations 1995)*) on page 479

PAC, 1990, 62, 2167 (*Glossary of atmospheric chemistry terms (Recommendations 1990)*) on page 2178