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Soot

National Cancer Institute

Source

National Cancer Institute. *Soot*. NCI Thesaurus. Code C44446.

Black particulate matter formed as by-products of combustion or pyrolysis of organic (carbon-containing) materials, such as coal, wood, fuel oil, waste oil, paper, plastics and household refuse. Their chemical compositions and physical properties are highly variable and depend on the type of starting material and the combustion conditions. Chemically, soots vary with respect to their relative amounts of carbon and the types of organic and inorganic compounds adsorbed to the particles. Physically, soots vary with respect to their particle types, sizes, and shapes. The primary routes of potential human exposure to soots are inhalation, ingestion and dermal contact. The general population may be exposed to soots from fireplaces, furnaces, engine exhaust and particulate emissions from any combustion source. These are known to be human carcinogens. (NCI05)