

mesophase pitch

A pitch with a complex mixture of numerous essentially aromatic hydrocarbons containing anisotropic liquid-crystalline particles (carbonaceous mesophase) detectable by optical microscopy and capable of coalescence into the bulk mesophase.

Note:

The carbonaceous mesophase particles are formed from the aromatics of high molecular mass in mesogenic pitch, which have not yet been aggregated to particles detectable by optical microscopy within the apparently isotropic pitch matrix. The carbonaceous mesophase is insoluble in quinoline and pyridine, but the amount of mesophase measured from microscopical observation appears somewhat higher because parts of the carbonaceous mesophase can be extracted by the solvents.

Source:

PAC, 1995, 67, 473 (*Recommended terminology for the description of carbon as a solid (IUPAC Recommendations 1995)*) on page 496