microporous carbon

A porous *carbon material*, usually a *char* or *carbon fibres*, which may or may not have been subjected to an activation process to increase its adsorptive properties. A microporous carbon is considered to have a major part of its porosity in pores of less than 2 nm width and to exhibit apparent surface areas usually higher than 200 to 300 $m^2\ g^{-1}$.

Notes:

The surface areas determined by the Brunauer–Emmett–Teller (BET) method are apparent surface areas only since the BET adsorption equation is, in principle, not valid when micropore filling occurs. The determination of the true surface area in the micropores depends on the method used for the evaluation of the adsorption isotherms and on the model used for the shape of the micropores (cylindrical, slit-shaped or other).

See *micropore*.

1995, *67*, 497; see also 1972, *31*, 518