Total porosity

Usually means a sum of effective porosity and additional rock volume occupied by some minerals which are seen as porosity development by some reservoir data logs:

$$\phi_t = \phi_e + V_{\text{minerals}}$$

For example, the neutron porosity sees shales as porosity development and can be considered as total porosity as against the effective porosity which contains hydrodynamically connected fluid volumes:

$$\phi_n = \phi_e + V_{sh}$$

Since the term does not specify the measurement physics to which it relates it is not advise for the usage outside the context