

macroporous polymer

Glass or rubbery polymer that includes a large number of macropores (50 nm–1 μm in diameter) that persist when the polymer is immersed in solvents or in the dry state.

Notes:

1. Macroporous polymers are often network polymers produced in bead form. However, linear polymers can also be prepared in the form of macroporous polymer beads.
2. Macroporous polymers swell only slightly in solvents.
3. Macroporous polymers are used, for example, as precursors for ion-exchange polymers, as adsorbents, as supports for catalysts or reagents, and as stationary phases in size-exclusion chromatography columns.
4. Porous polymers with pore diameters from *ca* 2 to 50 nm are called mesoporous polymers.

Source:

PAC, 2004, 76, 889 (*Definitions of terms relating to reactions of polymers and to functional polymeric materials (IUPAC Recommendations 2003)*) on page 900