

polymer blend

Macroscopically homogeneous mixture of two or more different species of polymer.

Notes:

1. In most cases, blends are homogeneous on scales larger than several times the wavelengths of visible light.
2. In principle, the constituents of a blend are separable by physical means.
3. No account is taken of the miscibility or immiscibility of the constituent macromolecules, *i.e.*, no assumption is made regarding the number of phase domains present.
4. The use of the term polymer alloy for a polymer blend is discouraged, as the former term includes multiphase copolymers but excludes incompatible polymer blends.
5. The number of polymeric components which comprise a blend is often designated by an adjective, *viz.* binary, ternary, quaternary, *etc.*

Source:

PAC, 2007, 79, 1801 (*Definitions of terms relating to the structure and processing of sols, gels, networks, and inorganic-organic hybrid materials (IUPAC Recommendations 2007)*) on page 1817