

gel point

Also contains definition of: gelation point

Point of incipient network formation in a process forming a chemical or physical polymer network.

Notes:

1. In both network-forming polymerization and the crosslinking of polymer chains, the gel point is expressed as an extent of chemical reaction (*c.f.*, gel time).
2. At the gel point a solid (network) material spanning the entire system is formed.
See also: gel fraction
3. The gel point is often detected using rheological methods. Different methods can give different gel points because viscosity is tending to infinity at the gel point and a unique value cannot be measured directly.

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 1809