

## ionomer cluster

Ionic aggregate, in a polymer matrix of low polarity, formed through interactions of ionomer multiplets.

Notes:

1. The mobility of the polymer segments surrounding the multiplets is reduced relative to that of bulk material. With increasing ion content, the number density of the ionomer multiplets increases, leading to overlapping of the restricted mobility regions around the multiplets and the formation of clusters.
2. Typically, an ionomer exhibits two glass transition temperatures ( $T_g$ ), one for the non-polar matrix and the other for clusters.

**Source:**

PAC, 2006, 78, 2067 (*Terminology of polymers containing ionizable or ionic groups and of polymers containing ions (IUPAC Recommendations 2006)*) on page 2072