

non-crystalline electrodes

Electrodes in which a support matrix, containing an ion exchanger (either cationic or anionic), a plasticizer solvent, and possibly an uncharged, selectivity-enhancing species, forms the ion-selective membrane which is usually interposed between two aqueous solutions. The support used can be either macroporous [e.g. poly(propylene carbonate) filter, glass frit, etc.] or microporous (e.g. 'thirsty' glass or inert polymeric material such as PVC) yielding with the ion-exchanger and the solvent a 'solidified' homogeneous mixture. These electrodes exhibit a response due to the presence of the ion-exchange material in the membrane. The solvent-polymeric-membrane is an example.

Source:

PAC, 1994, 66, 2527 (*Recommendations for nomenclature of ionselective electrodes (IUPAC Recommendations 1994)*) on page 2534