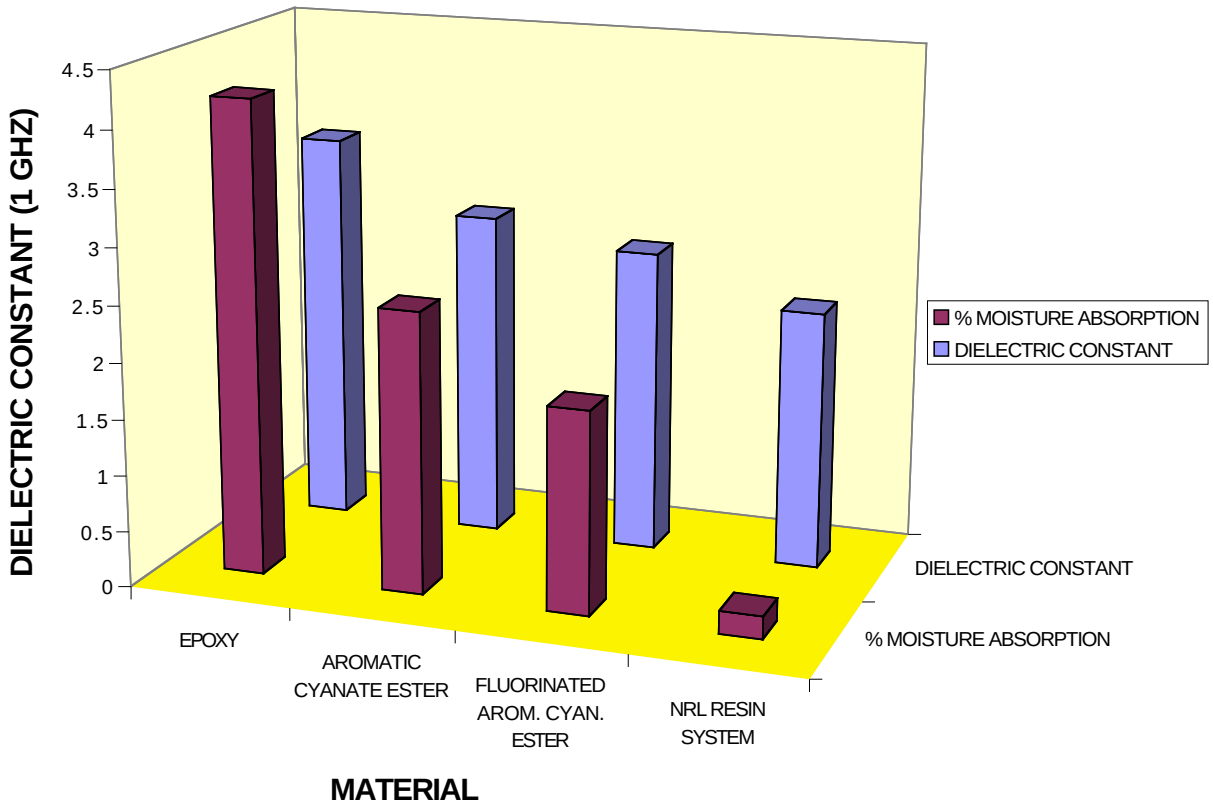
LOW DIELECTRIC CONSTANT POLYMERS



This polymer has fluoromethylene segments with triazine crosslinks that yield the desirable electrical and physical properties of PTFE (i.e., "Teflon") with the facile processing and adhesion characteristics of a thermoset resin.

The key advantages of this fluoropolymer resin system are:

- Very low permittivity (dielectric constant = 2.28 @ 1 GHz)
- Extremely low moisture absorption (0.2%) which translates to lower operational dielectric constants (wet dielectric constant = 2.4 @ 1 GHz)
- Improved adhesion characteristics compared to other fluoropolymers due to the triazine functionality
- Microelectronic applications such as circuit board resins, packaging films, and inter-level dielectrics are possible. Developmental efforts have addressed several engineering properties associated with these areas.
- Applications involving a high degree of electromagnetic transmission such as radomes and sensor apertures have also been explored and show significant potential.

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