Styrene less unsaturated polyester resin

NMRL has developed special polyester resin for adhering special rubber article onto metal surface. Unlike conventional polyester resin where the diluent is styrene, the polyester resin is a solution of unsaturated polyester in dimethacrylate. The final usage of resin is in the curable form which is done under electron beam irradiation. The qualitative requirement of resin included transparent liquid, curable under EB treatment as per specification, reasonable pot life and easy applicability. The resin is formulated in such a way that it gives optimum performance without failing in adhesion along with epoxy putty when the adhered structure is used underwater. The advantage of this resin over commercial resin is that it is styreneless, nontoxic and excellent storage life.

SALIENT FEATURES

- **Appearance** : Transparent viscous liquid of light brown colour.
- **Density at 20°C** : 1.15 – 1.19 g/cc
- **Relative viscosity at 20°C, as measured by viscometer with 5.4 mm nozzle diameter** : 20 – 40 s
- **Acid Value** : 16-24 mg/KOH
- **Percentage of Cobalt** : 0.09-0.13

**AREAS OF APPLICATION**

- Used for surface modification for rubber articles before bonding to metal surface

**STATUS**

Technology available for transfer