E-15

RADIATION PREVULCANIZATION OF NATURAL RUBBER LATEX BY γ-IRRADIATION AND ITS POTENTIAL INDUSTRIAL APPLICATIONS

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Physical strength of films prepared from radiation prevulcanized natural rubber latex (RPVL) could le matched with conventional sulphur cured systems by using an optimum radiation dose of 5 Mrads in the presence of CCl_4 sensitizer at a level of 3 to 5% on the dry rubber content. The films have to be heat treated to achieve optimum properties. Antioxidants such as bisphenols added to latex subsequent to irradiation improves the ageing resistance of the films.

Viscosity stability of irradiated latex is more consistent with low ammonia (LA) latex types containing secondary preservative systems compared to high ammonia (HA) latex types.