

Description

The lamination systems without filling mediums, intended to be used for laminating of materials from glass, carbon, or kevlar fibers. Letoxit PR 246 resin is produced on the basis of modified epoxy resin of Bisphenol A type.

Modification agent decreases resin viscosity. The resin is considered to be physiologically well compatible. Hardener is of amine type and do not contain nonylphenol. Due to the resin's low viscosity and thereby also lower interfacial tension it shows good wetting ability of lamination textiles and materials when combined in mixture with the Letoxit EM 315 hardening agent.

Application

Lamination compounds are intended to be used for production of components stressed in extreme conditions, e.g. aircraft and sail plane components, components for construction of models, gliders, construction of sporting boats, transport vehicle bodies, forms etc. Lamination compounds are suitable for all types of manufacturing, such as manual laminating, winding as well as when using pressure or vacuum.

The optimum processing temperature of mixture lies in temperature range between 20 – 25°C. A higher processing temperature is also possible, but it shortens the pot-life of the compounds. The mixture ratio must be followed as precisely as possible. Higher or lower dosage of the hardener does not result in acceleration or deceleration of the reaction, but leads to imperfect hardening and thereby also deterioration of mechanical properties. The immixture must be carried out properly. Mix it so long until the compound has no uniform transparent color and until there are no unstirred hardener „clouds“.

Do not mixture a big amount. During exothermic curing reaction develop big amount of heat, which could cause overheating of mixture over 200°C.

Resin specification

	Standard	Resin Letoxit PR 246	Hardener Letoxit EM 315
Density at 25°C (g/cm ³)	PN-5M-11	1,16+/- 0,02	0,94 – 0,97
Viscosity at 25°C (mPa.s)	PN-5M-01	950-1150	80 – 140
Epoxide equivalent	PN-5M-20	0,52-0,54	-
Hydrogen equivalent	-	-	64
Amine value (mg KOH/g)	PN-5M-06	-	500-600
Color	DIN ISO 4630	max. 6	transparent blue

APPLICATION METHOD

Letoxit® PR 246
Letoxit® EM 315

Version: 6/2013

Processing details

	Letoxit PR 246 + Letoxit EM 315
Processing temperature	18 – 30 °C
Viscosity of mixture at 25°C (mPa.s)	400-700
Storage at 15 – 25 °C	minimally 6 months in their carefully sealed original containers
Curing	24 hours at temperature 20-25 °C + 15 hours at 50°C

Mixture ratio

	Resin Letoxit PR 246 : hardener Letoxit EM 315
Parts by weight	100 : 34 ± 1
Vitality of systems for 200 g at 25oC.	50-60 min.
Tg (DSC)	75°C

Packing Resins and hardeners as well are supplied in PE containers in volume 5, 10 or 20 kg and also in 200 kg drums.