



resoltech
ADVANCED COMPOSITE TECHNOLOGY

ET 286

EPOXY SYSTEM FOR DIELECTRICAL APPLICATIONS

RESOLTECH ET286 is an epoxy casting system formulated for dielectrical applications, to encapsulate and insulate components in electrical and electronics applications.

RESOLTECH ET286 is available in red, blue and other colours. The system is self extinguishing (M2F1 class) and complies with UL 94V0.

MIXING RATIO

By weight: 100 + 13

By volume: 100 + 22

We recommend the use of a mechanical mixing system.

WARNING: The mixing ratio must be accurately followed. It is not possible to change the ratio, it would result in lower mechanical properties. The mixture should be thoroughly stirred to ensure full homogeneity.

It is important to note that epoxy systems tend to heat up much faster in a pot than as a thin film. It is therefore necessary to only mix the necessary amount usable within the given pot life. Keeping the mixture in flat open containers reduces the risks of exothermic reaction.

APPLICATION

RESOLTECH ET286 is a casting system.

A mixing machine should be used to mix and stir the resin and hardener.

It is also possible to mix the system manually.

Workshop temperature should be between 18°C and 30°C.

CURING

Geltime 60mn (+/-15mn) @ 25°C for 100g.

The geltime and pot life are dependent on the quantity mixed and the ambient temperature.

PHYSICAL PROPERTIES

Resin viscosity (ET286 A)	13,500
Hardener viscosity (ET286 B)	90
Mixture viscosity	2,000
Resin aspect	Visquous liquid
Hardener aspect	Yellow liquid
Mixture aspect	Hard and white (unless pigmented)
Resin density	1.63
Hardener density	0.95
Mixture density	1.51
TG	>70°C

MECHANICAL PROPERTIES

Hardness SHORE D	86 +/-3
Linear shrinkage	< 1%
Elongation	4 to 6%
Flexural strength	67 MPa
Thermal conductivity	0.59 W/m.K
Linear dilatation	45 µm/m/°C below TG, 110 over TG
Temperature range	From -30°C to +155°C
Dielectrical coefficient	22 kV/mm
Dielectrical average value	4.20 (@25°C under 100kHz)
Water absorption	0.09% (NFT 51002-24H @ 25°C)
Fire Class	M2F1 (NFT 16101-16102)
Self extinguishing under UL94	V0/4mm

PACKING & STORAGE

RESOLTECH ET286 is available as follow:

5kg+0.65kg = 5.65kg ; 25kg+3.25kg = 28.25kg.

Shelf life is 12 months in sealed containers as provided. Keep containers sealed and away from heat and cold, preferably below 25°C.

HEALTH AND SAFETY

It is advised to follow basic rules such as avoiding skin contact, wear masks when producing dust. Please read our standard health and safety sheet for more information.

In case of eye contamination, wash with water and seek medical advice.

RESOLTECH ET286 is a non-solvented system.

More information is available on www.resoltech.com.

The data provided in this document is the result of tests and is believed to be accurate. We do not accept any responsibility over the mishandling of these products and our liability is limited strictly to the value of the products we manufacture and supply.

RESOLTECH SARL
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