EPOPOX™ AFLV

Epoxy Resin

EPOPOX™ resins are low viscosity solvent free 100 % reactive epoxy resins taylor made for the composites industry. It is suitable for RTM, filament winding, laminating, pultrusion, infusion and many other aplications.

EPOPOX™ resins can be taylor made with different curing agents and accelerators to meet required cure rate, pot life and properties.

EPOPOX™ resins will give increased impact resistance, elongation to break and fatigue compared to any traditional epoxies.

TABLE 1: Process data

Before mixing	Mixing and processing	Curing
Clear the surface from dust, grease and moisture.	Mix the resin with curing agent properly for minimum 1 – 2 min.	The product can be cured even at +5 °C but higher temperature gives better properties.
The higher the temperature of the object the better flow and wetting are achieved.	Let the air come out and settle for min 2 – 5 minutes (even vacuum is possible).	Recommended heat cure range is from 6 hours at 60 °C to 5 minutes at 200 °C.
If possible preheat the resin component to 40 °C before use or use vacuum for air release.		

For the best results, please consult with Amroy Europe Oy.

Vertical surfaces in hand laminating:

The EPOPOX™ resins can be thicked with 2 % HDK / Aerosil for laminating vertical surfaces. That helps especially against sagging/draining. Also available in all RAL colours.

The EPOPOX™ resins do not crystallize and have a long storage stability of min 3 years when properly stored at closed containers.

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TABLE 2: Mix system technical data of different EPOPOX™ resins

Epopox AFLV, 25 °C	Amroy CA35	Amroy CA40	Mix 50/50
Mix ratio (by weight)	100:35	100:35	100:35
Mix viscosity 25 °C, mPa·s	500	800	600
Mix viscosity 40 °C, mPa·s	250	500	300
Density, kg/l	1.06	1.06	1.06
Colour	Clear when cured / black, green in liquid		
Gel time 25 °C (150 g)	6 hrs	15 minutes	1 h
Gel time 60 °C	60 minutes	5 minutes	20 minutes
Min cure temperature, °C	30	5	15
Recommended cure at 80 °C	6 hrs	not needed	6 hrs
Max Tg, °C	100	100	100
Elongation at break, %	10	5	8
Flexural modulus, GPa	3.6	3.4	3.5
Epopox AFLV resin viscosity, 25 °C	1500 – 2500 mPa·s		
Mix viscosity	250 mPa·s		

On request also high Tg systems available up to + 200 °C.

Storage Data

The products can be stored at temperatures between 0 – 60 °C in closed containers in dry place protected from direct sunlight. Minimum storage time is 3 years.

TABLE 3: Sales Packages

Epopox AFLV	1100 kgs IBC	225 kgs drum	20 kgs cans
Curing agent Amroy CA35 / CA40	900 kgs IBC	180 kgs drum	18 kgs cans

Amroy Europe References / Application

Warrior Sports / Montreal	RTM	Finland
Peltonen Skis	Glue	Finland
Baltic Yachts	Laminating	Finland
Kajak Sports	VARTM / infusion	Hungary
Exel Composites	Filament winding	Finland
CompoTech	Pultrusion	Czech Republic
EASTON	Pultrusion / Pre-Preg	USA

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