

RESIN	HARDENER	MIXING RATIO
501 Component A	EH 234 Component B	100:30

DESCRIPTION: Un-filled epoxy system. The system EC 130LV/W 342 allows the obtainment of a good surface finish. Very good resistance toward UV. Good thermal resistance. The post-curing at moderate temperature is suggested to obtain the best performance for the system.

APPLICATIONS: High performances composite parts of small and medium size. Structural parts of: boats, model aircrafts, racing vehicles, sport components.

PROCESSING: Under vacuum impregnation, manual at atmospheric pressure and under vacuum bag of wood, glass, carbon or kevlar fiber tissue. Room temperature or moderate temperature curing.

INSTRUCTIONS: Add the proper quantity of the hardener to the resin, mix carefully. Avoid air trapping. For the surface preparation (mould or model) refer to the release agents data sheet.

POST-CURING: The post curing, always advisable for RT curing systems in order to stabilize the component and to reach the best properties, is necessary when the component works at high temperature. Post cure the tool as stated in the table, increasing gradually 10°C/hour. The rate of healing and the indicated post-curing time are referred to standard specimen size. Users should evaluate the best conditions of curing or post-curing depending on the component size and shape. For big size components decrease the thermal gradient and increase the post-curing time.

STORAGE AND PRECAUTIONS: Epoxy resins and their hardeners can be stored two years in the original sealed containers stored in a cool and dry place. The hardeners are moisture sensitive therefore it is a good practice to close the vessel immediately after each use.

SYSTEM SPECIFICATIONS:

RESIN:	Viscosity at 25°C (EN13702-2)	mPas	1.000 - 1.500
	Epoxy equivalent	g/equiv.	185,8 - 190,1
HARDENER:	Viscosity at 25°C	mPas	30 - 70

TYPICAL SYSTEM CHARACTERISTICS

PROCESSING DATA	EH 234
Resin colour	Colourless
Hardener Colour	Colourless
Density at 25°C resin (ASTM D 1475)	1,10 - 1,15 (g/ml)
Density at 25°C hardener (ASTM D 1475)	0,94 - 0,97 (g/ml)
Mixing ratio by weight(for 100 g. RESIN)	30 g.
Mixing ratio by volume (for 100 ml. RESIN)	37 ml.
Initial mixture viscosity at 25°C (EN13702-2) (*)	600 - 700 Mpa
Gelation time 25°C (15ml;6mm) (*)	h 2 - 3
Demoulding time 25°C (15ml;6mm) (*)	h 12 - 17
Pot - Life (EN13702-2) (*)	min. 20 - 30
Post curing 60 °C	h 12 - 15
Maximum recommended thickness	mm 3 - 5

TYPICAL CURED SYSTEM PROPERTIES

Properties determined on specimens cured: 24 h TA + 15 h 60°C.

PROCESSING DATA	EH 234
Colour	Colourless bright
Machinability	Excellent
Hardness^{25°C} (ASTM D 2240)	Shore D/15 85 - 90
Glass transition (T_g) (ASTM D 3418)	°C 88 - 93
Max recommended operating temperature (***)	°C 80
Flexural strength (ASTM D 790)	MN/m ² 130 - 140
Strain at break (ASTM D 790)	% 5,8 - 6,2
Flexural elastic modulus (ASTM D 790)	MN/m ² 3.200 - 3.600
Tensile strength (ASTM D 638)	MN/m ² 70 - 75
Elongation at break (ASTM D 638)	% 3,6 - 4,0
Compressive strength	MN/m ² 104 - 108

nd = not determined; na = not applicable; RT = TA = laboratory room temperature (23±2°C)

Conversion units: 1 mPas = 1 cPs 1MN/m² = 10 kg/cm² = 1 MPa

(*) for larger quantities pot life is shorter and exothermic peak increases

(**) the brackets mean optionality

(***) The maximum operating temperature is given on the basis of laboratory information available being it function of the curing conditions used and of the type of coupled materials. For further possible information see post-curing paragraph.

The information given in this publication is based on the present state of our technical knowledge but buyers and users should make their own assessments of our products under their own application conditions.