

EN Product Information

Elan-tech ® EC 131LV/W 152 XLR (ex. W 131) 100:25 by weight

ELANTAS EUROPE Sales offices:

Strada Antolini n°1 loc. Lemignano 43044 Collecchio (PR) Italy Tel +39 0521 304777 Fax +39 0521 804410

Grossmannstr. 105 20539 Hamburg Germany Tel +49 40 78946 0 Fax +49 40 78946 349

info.elantas.europe@altana.com www.elantas.com



Resin EC 131LV

Hardener
W 152 XLR (ex. W
131)

Mixing ratio by weight

100:25

Application: Copling layers of large size composites.

Processing: Filled with hollow microspheres and/or thixotropic agents to obtain putties to be used as

connecting layers of composites with PVC foam. Room temperature or hot curing.

Description: Un-filled epoxy system. The hardener W 131 has a long pot life.

SYSTEM SPECIFICATIONS

| DACIE | • |
|-------|---|
| VESII | |
| | - |

| Viscosity at: | 25°C | IO-10-50 (EN13702-2) | mPas | 1.000 | 1.600 |
|------------------------------------|------|----------------------|------|-------|-------|
| Hardener | | | | | |
| FTIR spectrum (correlation factor) | | IO-10-75 | | 0,990 | 1,000 |

TYPICAL SYSTEM CHARACTERISTICS

Processing Data

| Mixing ratio by weight | for 100 g resin | g | 100 | 0:25 |
|------------------------------------|------------------------|------|------|--------|
| Mixing ratio by volume | for 100 ml resin | ml | 100 | 0:30 |
| Resin Colour | | | | olet |
| Hardener Colour | | | Pale | yellow |
| Viscosity at: 25°C Hardener | IO-10-50 (EN13702-2) | mPas | 10 | 30 |
| Density at: 25°C Resin | IO-10-51 (ASTM D 1475) | g/ml | 1,10 | 1,15 |
| Density at: 25°C Hardener | IO-10-51 (ASTM D 1475) | g/ml | 0,90 | 0,95 |
| Pot life 25°C (40mm;100ml) | IO-10-53 (*) | min | 150 | 170 |
| Initial mixture viscosity at: 25°C | IO-10-50 (EN13702-2) | mPas | 300 | 800 |
| Gelation time 25°C (15ml;6mm) | IO-10-73 (*) | h | 8 | 10 |
| Post-curing 60°C | (**) | h | (15) | |



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TYPICAL CURED SYSTEM PROPERTIES

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

| Colour | | | Violet | | |
|---------------------------------------|------------------------|------------|--------|------|--|
| Density 25°C | IO-10-54 (ASTM D 792) | g/ml | 1,10 | 1,14 | |
| Hardness | IO-10-58 (ASTM D 2240) | Shore D/15 | 84 | 87 | |
| Glass transition (Tg) | IO-10-69 (ASTM D 3418) | °C | 70 | 75 | |
| Water absorption (24h RT) | IO-10-70 (ASTM D 570) | % | 0,30 | 0,40 | |
| Water absorption (2h 100°C) | IO-10-70 (ASTM D 570) | % | 1,30 | 1,40 | |
| Max recommended operating temperature | (***) | °C | 6 | 5 | |

IO-00-00 = Elantas Italia's test method. The correspondent international method is indicated whenever possible.

nd = not determined na = not applicable $RT = TA = laboratory room temperature (23<math>\pm$ 2°C)

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

(**) the brackets mean optionality

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

^(***) 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.



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Instructions: Add the appropriate quantity of hardener to the resin, mix carefully. Avoid air trapping. For the

surface preparation (mould or model) refer to the release agents data sheet.

Curing Post-curing:

Post curing is always advisable for RT curing systems in order to stabilize the component and to reach the best properties. It is necessary when the component works at a high temperature. Post cure the tool as stated in the table, increasing gradually 10°C/hour. The rate of heating 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. In the case of thin

layer applications and composites post cure on the jig.

Storage: Epoxy resins and their hardeners can be stored for two years in the original sealed containers

stored in a cool, dry place. The hardeners are moisture sensitive therefore it is good practice to

close the vessel immediately after each use.

Handling precautions:

Refer to the safety data sheet and comply with regulations relating to industrial health and waste

disposal.

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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.