

EN Product Information

Elan-tech®

PC 6 NF/G 30 100:7,5

PC 6 NF/G 130 100:15

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Resin
PC 6 NF

Hardener
G 30
G 130

Mixing ratio by weight
100:7,5
100:15

Application: Ceramic case moulds. Moulds for sanitary and artistic ceramic industry. Moulds for plaster and cement components.

Processing: Face and solid casting. Room temperature curing.

Description: Two component elastomeric system. Good tear resistance. Good dimensional stability.
WARNING: the product may crystallize at temperatures close to 0°C Thixotropic. Read the instructions in Chapter "Storage".
WARNING: the final hardness reached at different times depending on the casting temperature and/or the environment temperature.

SYSTEM SPECIFICATIONS

Resin

Viscosity at:	25°C	IO-10-50 (EN13702-2)	mPas	7.000	11.000
Density at:	25°C	IO-10-51 (ASTM D 1475)	g/ml	1,42	1,46
Gelation time	25°C 100 ml	IO-10-52a (UNI 8701)	min	20	30

Hardener G 30

Viscosity at:	25°C	IO-10-50 (EN13702-2)	mPas	100	250
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Hardener G 130

Viscosity at:	25°C	IO-10-50 (EN13702-2)	mPas	170	270
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TYPICAL SYSTEM CHARACTERISTICS

Resin

Resin Colour	Beige
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Hardeners

			G 30	G 130
Hardener Colour			Brown	Blue/
Density	25°C	IO-10-51 (ASTM D 1475)	g/ml	1,21 1,23 1,18 1,22

Processing Data

Mixing ratio by weight		for 100 g resin	g	100:7,5	100:15
Mixing ratio by volume		for 100 ml resin	ml	100:9	100:20
Pot life	25°C (50mm;200ml)	IO-10-53 (*)	min	20 25	20 30
Exothermic peak	25°C (50mm;200ml)	IO-10-53 (*)	°C	35 40	35 40
Initial mixture viscosity at:	25°C	IO-10-50 (EN13702-2)	mPas	2.500 4.000	3.000 4.000
Gelation time	25°C (15ml;6mm)	IO-10-73 (*)	h	1 2	1,5 2,0 20 30
Demoulding time	25°C (15ml;6mm)	(*)	h	14 18	14 18
Post-curing	60°C	(**)	h	(10 - 15)	(10 - 15)

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TYPICAL CURED SYSTEM PROPERTIES

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

			G 30		G 130	
Colour			Beige		Light blue	
Density	25°C	IO-10-54 (ASTM D 792)	g/ml		1,41	1,45
Hardness	24h 15°C	IO-10-58 (ASTM D 2240)	Shore A/15		51	55
	48h 15°C		Shore A/15		60	64
	24h 25°C		Shore A/15		58	62
	24h 35°C		Shore A/15		62	66
	48h 35°C		Shore A/15		63	67
	15h 60°C		Shore A/15		61	65
Linear shrinkage			‰		0,2	0,5
Water absorption (24h RT)		IO-10-70 (ASTM D 570)	%		0,2	0,4
Tensile strength		IO-10-63 (ASTM D 638)	MN/m ²		3,0	5,0
Elongation at break		IO-10-63 (ASTM D 638)	%		90	140

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±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.

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Instructions: Homogenize the components before use. Add the appropriate quantity of hardener to the resin, mix carefully. Avoid air trapping. Cast on shapes well insulated from moisture and dried. Caution: mixing ratio variations $\pm 1 \%$ of stated quantity cause hardening problems and property degradation. For the surface preparation (mould or model) refer to the release agents data sheet.

Curing / Post-curing: Normally the post-curing is not necessary.

Storage: Resin may crystallize at temperatures near to 0°C even during transport. In that case it gets more viscous and tixotropic. In order to bring it back to the original conditions, heat up the resin at 60 -80°C for 6-4 hours until crystallization disappear. Check wheather this phenomenon arises again when products is brought back at room temperature.
 Rehomogenize product before use. Isocyanate G130 may separate during storing because components have different density.
 Shake before use always. Polyol resins and the isocyanate based hardeners can be stored for one year and six months respectively in the original sealed containers stored in a cool, dry place. The hardeners may present an increase in viscosity that does not change the cured system properties. Both components are moisture sensitive therefore it is good practice to close the vessels immediately after each use. Moisture absorption may cause the expansion of the product during application and/or the hardener may crystallize during storage. Long storage may cause filler settling mix the components before 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.