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Liquid Rubbers & Resins Chemicals for Industry & Artworks

RESIN	HARDENER	MIXING RATIO
183 Blue Component A	K183/M Component B	100:12

INTRODUCTION: Two component filled epoxy system. Solid, very good mechanical and thermic

property. Abrasion resistant.

APPLICATION: Foundry patterns, core box, copy moulds.

PROCESSING: Face and solid casting. Curing at room temperature.

ISTRUCTIONS: Prepare surface of moulds with 2 or 3 applications of wax release agents.

Homogenize the resin components before use. Mix the two components (resin and hardener) in the proper mixing ratio avoiding air trapping until an homogeneous

mixture is obtained, then apply.

POST-CURING: Post curing is always advisable for curing systems in order to stabilize the cured

handwork and to reach the best mechanical properties. Post curing becomes necessary when the handwork works at elevated temperature. Post cure the handwork as stated in the table, avoiding thermal gradients over 10° C/hour. The thermal gradient and post curing time refer to standard specimens. Users should find the best conditions depending on the component size and shape (for big size components decrease the thermal gradient and increase the post curing time).

STORAGE AND HANDLING PRECAUTIONS:

Epoxy resins and hardeners over two years in the original well sealed package, in a cool and dry place. The hardeners are moisture sensitive (keep the package

tightly sealed!). Refer to the product health and safety data sheet.

SYSTEM

SPECIFICATIONS:

RESIN: Viscosity at 25°C mPa 90.000 - 130.000

HARDENER: Viscosity at 25°C mPa 180 - 250

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TYPICAL SYSTEM CHARACTERISTICS

Resin Colour	Blue	
Hardener Colour	Pale Yellow	
Density resin at 25*C (ASTM D 1475)	2,02 - 2,05 (g/ml)	
Density hardener at WC (ASTM 0 1475)	0,98 - 1,02 (g/ml)	
PROCESSING DATA	A + B	
Mixing ratio by weight	100:12 g.	
Mixing ratio by volume	100:24 ml.	
Pot life (200 ml, 40 mm, 25°C)	25 - 45 Min.	
Exothermic peak (200 ml, 50 mm, 25°C)	55 - 65 °C	
Demoulding time (15 ml; 5 mm, 25 ° C)	20 – 24 h	
Gelation time (15 ml, 5 mm, 25°C)	3,5 – 4 min.	
Post-curing 60°C	10 – 15 h	
Maximum recommended thickness	30 mm	

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CURED SYSTEM PROPERTIES

Properties determined on standard specimens cured 24 h at R.T. (23±2° C) + 15 h at 60° C

DATI DI LAVORAZIONE	A + B
Colour	Blue
Machinability	Low
Density (ASTM D 792)	1.88 - 1.91 g/ml
Shore hardness (ASTM D 2240)	93 - 96 D/15
Glass transitino (ASTM D 3418)	75 – 79 °C
Max. recommended operating temperature	70 °C

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

(*) 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.

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