ELANTAS
Electrical Insulation

EN

Product Information

PLASTICRETE
P-COAT G 01/P-FILLER FR
30:100 by weight (1:3,333)

suter-kunststoffe ag
swiss-composite.ch
CH-3312 Fraubrunnen 031 763 60 60 Fax 763 60 61

ELANTAS Beck GmbH
Grossmannstr. 105
20539 Hamburg
Germany
Tel +49 40 78946 0
Fax +49 40 78946 276
info.elantas.beck@altana.com
www.elantas.com

ELANTAS Camattini S.p.A.
Strada Antolini n°1 loc. Lemignano
43044 Collecchio (PR)
Italy
Tel +39 0521 304711
Fax +39 0521 804410
info.elantas.camattini@altana.com
www.elantas.com

ELANTAS UK Ltd
Keate House
1 Scholar Green Road
Cobra Court
Manchester M32 0TR
United Kingdom
Tel +44 161 848 8411
Fax +44 161 848 0966
info.elantas.uk@altana.com
www.elantas.com

A member of ALTANA

ELANTAS Electrical Insulation

	Resin	Filler	Mixing ratio by weight
PLASTICRETE	**P-COAT G 01**	**P-FILLER FR**	**30:100**

Applications: Surface layers for flame resistant architectural elements and sculptures reproduction. It is possible to obtain materials that look like natural stones or metals through the addition of the correct fillers or pigments. Surface finishing of low density polystyrene for scenographic decors.

Processing: Brush application for thick layers. Room temperature curing.

Description: PLASTICRETE P-COAT G01 is a water based acrylic resin that reacts with the special filler forming a thixotropic dispersion that can be easily brushed. 50% of final mechanical performances are obtained after 15 hours at 20°C only. **The product fulfills testing of the Italian Body for the class 1 (one) of fire resistance.**

Instructions: Apply on the model or mould surface 2 layers of release agents Z 14, or Z15LC (wax release agent with solvent) or simple wax for furniture waiting 5/10 minutes after each application. Weigh the liquid (resin), after rehomogenization, in a clean vessel in the mixing ratio of 30 parts. Add the filler in the correct ratio and mix slowly with a mixing whisk to facilitate the powder dispersion. Wait 1 minute before starting the mixing, manually or mechanically at medium speed (1000-2000 rpm) with whisk or elicolidal spindle for 2 minutes until a complete homogenized material is obtained. Apply the product with a soft hardness bristle brush, paying particular attention in correspondance of edges or complicated shapes where it is easy to entrap air. Wait the time necessary to obtain a tack free product (minimum 30 minutes) or complete curing (there is not a time limit) before continuing with the casting or with further layers. All the Plasticrete resins can be additivated with iron oxide based pigments or with aluminium powders (our Ecka AS31) or inert fillers to obtain the preferred finishing effect. The addition of fillers reduces proportionally the mechanical properties of the material.

Curing Post-curing: Post-curing is not always necessary. The data reported in the table is obtained on specimens 4x4 cm after complete drying. The treatment at 30-40°C in a ventilated warm area after demoulding speeds up the hardening of the product. For high temperature applications with dry moulds (ex. pre-pregs moulds) after a first curing at room temperature for at least 6 hours it is advisable to dry the part in the oven at 60°C for 12-24 hours.

Storage: **The acrylic-water based dispersions can be damaged at temperatures lower than 0°C: it is therefore advisable to store the product in an area at temperatures higher than 0°C. The resin must be rehomogenized before use.** The filler reacts with humidity and water so it is necessary to keep it in a closed vessel and in a dry place. Before using the products it is necessary to conditionate them at 15°C minimum for at least 24 hours because at low temperatures the setting and stabilization times of the materials becomes much longer. The acrylic-water based dispersions and relative filler can be stored for one year in the original sealed containers stored in a cool, dry place.

Handling precautions: The acrylic-water based dispersions and relative filler are not dangerous products according to EC regulations. Refer to the safety data sheet and comply with regulations relating to industrial health and waste disposal.

Elantas Camattini S.p.A. - Thermosetting Resins Strada Antolini, 1 - I-43044 Collecchio (Parma)
Tel. +39 0521 304711 - Fax +39 0521 804410 (mkt) 804679 - info.elantas.camattini@altana.com - www.elantas.com

ELANTAS Electrical Insulation

	Resin	Filler	Mixing ratio by weight
PLASTICRETE	**P-COAT G01**	**P-FILLER FR**	**30 : 100**

SYSTEM SPECIFICATIONS

Vicat (min) at 25°C	IO-10-73 (*)	min	24 34

TYPICAL SYSTEM CHARACTERISTICS

Processing data

Resin colour			Milky white
Viscosity resin at 25°C	IO-10-50	mPas	550 700
Density resin at 25°C	IO-10-51 (ASTM D 1475)	g/ml	1,01 1,08
Filler colour			Natural white
Apparent density filler		g/ml	1,30 1,40
Mixing ratio by weight	EACH 100 G OF FILLER	g	30
Initial mixing viscosity at 25°C	IO-10-50	mPas	15.000 19.000
Pot life (38.000 mPas, 25°C)	IO-10-50	min	20 30
Setting time		min	60 70
Demoulding time (depends on: room temperature, thickness, shape, etc)		h	4 15
Post-curing	40°C (**)	h	(15)
Maximum recommended thickness		mm	1 - 2

TYPICAL CURED SYSTEM PROPERTIES

Properties determined on standard specimens cured 7 days at TA

Colour			Natural white
Density	IO-10-54 (ASTM D792)	g/ml	1,60 1,70
Machinability			good
Shore hardness	IO-10-58 (ASTM D2240)	D/15	82 86
Heat dimensional stability		°C	120
Flammability	UNI 9177		Class 1

(*) for larger quantities pot life is shorter and the exothermic peak increases
(**) the brackets mean optionality
IO-00-00 = Camattini's test method. The correspondent international method is indicated whenever possible.
nd = not determined na = not applicable RT = laboratory room temperature (23±2°C)
Conversion units: 1 mPas = 1 cPs $1 MN/m^2 = 10 kg/cm^2 = 1 MPa$

emission date:	July	2006/R&S
revision n° 01	September	2007/R&S