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POLYURETHANE RESIN PC17 + G127

DESCRIPTION:
Two-component system, odorless, liquid, resilient with separated filler, which must be added if necessary to reduce retraction and exotherm. High reactivity. Very high quality of reproduction.

APPLICATION:
Reproduction of scale models and prototypes. Matrices, foundry patterns, negatives and pilot dies when filled.

PROCESSING:
Manual blending. Mechanical mixing. Poured into the mold within the pot-life of the system. It can be used as is or the mixture can be added with the filler in the proposed or different proportion depending on the application and thickness required. The more filler loaded, the lower the shrinkage.
Note: homogenize the resin before use (follow instructions).

SYSTEM SPECIFICATIONS:
Resin PC 17

✓ Viscosity at 25°C	100-140 mPas
✓ Color pale	yellow
✓ Density at 25°C	0.93-0.97 g/ml

Harder G 127

✓ Viscosity at 25°C	20-40 mPas
✓ Color	brown
✓ Density at 25°C	1.09-1.11 g/ml

CHARACTERISTICS OF THE TYPICAL SYSTEM:
Processing Data:

✓ Mixing ratio by weight	100:100
✓ Mixing ratio in volume	100:100
✓ Initial viscosity of the mixture at 25°C	40-70 mPas
✓ Gelling time at 25°C (15ml; 6mm)	3-5 min
✓ Formation time at 25°C (15ml; 6mm)	25-35 min
✓ Maximum recommended thickness	5 mm

TYPICALLY CURED SYSTEM PROPERTIES:
Properties determined on cured samples: 24 h KT (room temperature) + 15 h 60°C

✓ Color	beige
✓ Machinability	Excellent
✓ Density at 25°C	1.06-1.10 g/ml
✓ Hardness at 25°C	73-77 shore D/15
✓ Glass Transition (Tg)	75-85°C
✓ Max Tg	99-105°C
✓ Bending strength	40-50 MN/m²
✓ Max voltage	5.0-7.5%
✓ Stress to fracture	> 15%
✓ Bending elastic mode	1.100-1.300 MN/m²
✓ Tensile strength	22-27 MN/m²
✓ Elongation to fracture	5.0-7.5%

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INSTRUCTIONS:
Check components and homogenize if necessary before use. Add the correct amount of hardener to the resin, mix carefully. Avoid air entrapment. Apply. For surface preparation (mould or model) refer to the release agent data sheet.

CURING / POST TREATMENT:
Normally, post-treatment is not necessary.

BEWARE:
Polyol resins and isocyanate based hardeners have a shelf life of one year in the original sealed container in a cool and dry place. The hardeners may exhibit a viscosity increase that does not change the properties of the cured system. After that period or if the material has been stored under abnormal conditions, pre-filled resins may precipitate and can only be used if they are accurately re-homogenized using, if necessary, a mechanical mixer. Both components are moisture sensitive, therefore it is good practice to close the containers immediately after each use. Moisture absorption may cause the product to expand during application and/or the hardener to crystallize during storage. The isocyanates may crystallize at low temperatures. Heat the material to 70-80°C to avoid local overheating and restore original conditions. Before use, re-homogenize and cool to room temperature.

TREATMENT PRECAUTIONS:
Consult the data sheet and observe the regulations on industrial health and waste disposal.