

## EPOXY MODELLING PASTE

DENSITY 0.8 – HARDNESS 58 D Shore

### DESCRIPTION

Models and mock-ups production by extrusion process.

### PROPERTIES

- Low density
- Low hardness
- Time before machining shorter than 24 hours
- Good thermal resistance

| PHYSICAL PROPERTIES                           |                 |               |               |               |
|---|-----------------|---------------|---------------|---------------|
| Composition                                   |                 | RESIN         | HARDENER      | MIXED         |
| Mix ratio by weight                           |                 | 100           | 100           |               |
| Aspect  |                 | viscous paste | viscous paste | viscous paste |
| Colour  |                 | brown         | white         | brown         |
| Viscosity at 25°C 0.9 s <sup>-1</sup> (Pa.s)  | ISO 3219 : 1994 | 1,000         | 900           | 1,000         |
| Specific gravity at 25°C (g/cm <sup>3</sup> ) | ISO 1675 : 1985 | 0.76          | 0.76          | -             |
| Specific gravity of cured product at 23°C     | ISO 2781 : 1996 | -             | -             | 0.81          |

### PROCESSING CONDITIONS

**During processing the dispensing nozzle must be maintained perpendicular to the surface on which the product is applied. Ensure overlap of ribbon.**

**CAUTION : Exotherm mostly depends of the type of machine and of the working parameters such as :**

- Room temperature.
- Insulating property of support.
- The mixture temperature (depending of the type of mixer: static or dynamic) and the speed of mixing and output.
- Applied thickness.

On vertical support, apply a thin coat of product with a spatula. This operation helps to reinforce the bonding on the support.

On ceiling application, apply a maximal thickness of 30 mm.

Use a dynamic mixer preferably.

Otherwise, double length of static mixer.

For dynamic mixing machine, please contact us for parameters

| EXOTHERMIC PEAK AND HARDENING TIME (2) |                          |                       |                      |                     |
|--|--------------------------|-----------------------|----------------------|---------------------|
| Thickness (mm)                         | Product temperature (°C) | Exothermic peak (min) | Exothermic peak (°C) | Workability (hours) |
| 40                                     | 22                       | 174                   | 63                   | 16 - 18             |

(2) Room temperature : 22°C –dimensions of polystyrene support : 250 x 250 mm

### MECHANICAL PROPERTIES at 23°C (1)

|                      |                |          |       |
|----------------------|----------------|----------|-------|
| Hardness             | ISO 868 : 2003 | Shore D1 | 58    |
| Tensile modulus      | ISO 527 : 1993 | MPa      | 1,300 |
| Tensile strength     | ISO 527 : 1993 | MPa      | 10    |
| Elongation at break  | ISO 527 : 1993 | %        | 1.3   |
| Flexural modulus     | ISO 178 : 2010 | MPa      | 950   |
| Flexural strength    | ISO 178 : 2010 | MPa      | 17    |
| Compressive modulus  | ISO 604 : 2002 | MPa      | 790   |
| Compressive strength | ISO 604 : 2002 | MPa      | 20    |

### THERMAL AND SPECIFIC PROPERTIES (1)

|  |                    |                                  |    |
|--|--------------------|----------------------------------|----|
| Glass transition temperature (Tg)                          | ISO 11359-2 : 1999 | °C                               | 84 |
| Coefficient of thermal expansion (CTE)<br>(+10°C to +70°C) | ISO 11359-2 : 1999 | 10 <sup>-6</sup> K <sup>-1</sup> | 80 |
| Maximal thickness  | -                  | mm                               | 40 |

(1) Average values obtained on standardized specimens / Hardening 24 h at 23°C + 16 h at 60°C

## HANDLING PRECAUTIONS

Normal health and safety precautions should be observed when handling these products :

- Ensure good ventilation
- Wear gloves, safety glasses and waterproof clothes

For further information, please consult the product safety data sheet.

## STORAGE CONDITIONS

Shelf life of both parts is **12 months** in a dry place and in their original unopened containers at a temperature between 15 and 25°C

Any open must be tightly closed under dry nitrogen.

## PACKAGING

| SC 180 RESINE | SC 180 DURCISSEUR |
|---------------|-------------------|
| 35 KG         | 35 KG             |
| 140 KG        | 140 KG            |

## GUARANTEE

The information contained in this technical data sheet result from research and tests conducted in our Laboratories under precise conditions. It is the responsibility of the user to determine the suitability of AXSON products, under their own conditions before commencing with the proposed application. AXSON guarantee the conformity of their products with their specifications but cannot guarantee the compatibility of a product with any particular application. AXSON disclaim all responsibility for damage from any incident which results from the use of these products. The responsibility of AXSON is strictly limited to reimbursement or replacement of products which do not comply with the published specifications..