

## DESCRIPTION

Material for the construction of tools, models and other tooling requirements.

## PROPERTIES

- Mixing ratio 1/1
- Low C.T.E.
- Easy mixing with planetary mixer
- Can be applied up to 30 mm (1.2 inches) per layer

| PHYSICAL PROPERTIES                       |                 |       |          |       |
|-------------------------------------------|-----------------|-------|----------|-------|
| Composition                               |                 | RESIN | HARDENER | MIXED |
| Mix ratio by weight                       |                 | 100   | 100      |       |
| Mix ratio by volume at 25°C               |                 | 100   | 100      |       |
| Aspect                                    |                 | paste | paste    |       |
| Colour                                    |                 | grey  | white    | grey  |
| Specific gravity at 25°C                  | ISO 1675 : 1975 | 0.90  | 1.08     | -     |
| Specific gravity of cured product at 23°C | ISO 2781 : 1988 | -     | -        | 1.00  |
| Pot life at 25°C on 500 g min             |                 |       |          | 70    |

## PROCESSING CONDITIONS

SC 110 has been developed to allow a convenient mix ratio (1:1 by volume and weight). Mix the grey resin with the white hardener until a light grey compound is obtained. It guarantees that a full mix is achieved and eliminates any possibilities of "hot spots" in the tool. When mixed SC 110 is a dough compound which can be applied to the tool surface without crumbling or cracking. Curing does not produce excessive exotherm for thickness below 30 mm (1.2 inches).

| MECHANICAL PROPERTIES at 23°C <sup>(1)</sup> |               |                |         |
|----------------------------------------------|---------------|----------------|---------|
| Hardness                                     | ISO 868 :2003 | Shore D1 / D15 | 76 / 74 |
| Flexural modulus                             | ISO 178 :2001 | MPa            | 3400    |
| Flexural strength                            | ISO 178 :2001 | MPa            | 30      |
| Compressive strength                         | ISO 604 :2002 | MPa            | 50      |

(1) : Average values obtained on standard specimens / Hardening 16 hr at 60°C

| THERMAL AND SPECIFIC PROPERTIES <sup>(1)</sup>                     |                   |                                                                       |           |
|--------------------------------------------------------------------|-------------------|-----------------------------------------------------------------------|-----------|
| Glass transition temperature                                       | ISO 11359-2 :1999 | °C<br>°F                                                              | 67<br>152 |
| Coefficient of thermal expansion (CTE) [+5, +55]°C - [+41, +131]°F | ISO 11359-2 :1999 | 10 <sup>-6</sup> K <sup>-1</sup><br>10 <sup>-6</sup> °F <sup>-1</sup> | 27<br>15  |
| Maximal casting thickness                                          |                   | mm                                                                    | 30        |
| Demold time at 23°C                                                |                   | hrs                                                                   | 12 - 18   |
| Full cure at 23°C                                                  |                   | hrs                                                                   | 48        |

## 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 is 12 months for both PART in a dry place and in original unopened containers at a temperature between 15 and 25° C.

## PACKAGING

### SC 110 RESIN :

1 x 10 kg

### SC 110 HARDENER :

1 x 10 kg

## GUARANTEE

*The information of our technical data sheet are based on our present knowledge and the result of tests conducted 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 refuse any guarantee about 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 guarantee conditions are regulated by our general sale conditions.*