TRANSLUX D 180

TRANSPARENT EPOXY RESIN

DESCRIPTION

Resin for Model-Mould or transparent part manufacturing.

PROPERTIES

- *High transparency*
- *Temperature resistance*
- *Adjustable reactivity depending on the thickness*

PHYSICAL PROPERTIES				
Composition		**RESIN**	**HARDENER**	**MIXED**
Mix ratio by weight Mix ratio by volume at 25°C		100 100	45 53	
Accelerator in variable weight*		0 - 3		
Aspect		liquid	liquid	liquid
Colour		colourless	colourless	transparent
Viscosity at 25°C	BROOKFIELD LVT	2,700	75	640
Specific gravity at 25°C (g/cm^3) Specific gravity of cured product at 23°C	ISO 1675 : 1985 ISO 2781 : 1996	1.16 -	0.98 -	- 1.10
Pot life at 30°C on 600 g (hrs) . 1 % accelerator/resin . 2 % accelerator/resin . 3 % accelerator/resin	Gel Timer TECAM			 9 5 3

**Accelerator rate is resin related*

MECHANICAL PROPERTIES at 23°C			
Values recorded after stabilisation at room temperature and curing for 24 hours at 60°C (without yellowing)			
Hardness	ISO 868 : 2003	Shore D1	84
Tensile strength	ISO 527 : 1993	MPa	57
Flexural modulus	ISO 178 : 2001	MPa	2,500
Flexural strength	ISO 178 :2001	MPa	95
Compressive strength at yield	ISO 604 : 2002	MPa	70
Glass temperature transition (Tg)	ISO 11359 : 2002	°C	65
Maximum values recorded after stabilisation at room temperature and complete hardening (6 hours at 50°C, 12 hours at 80°C) ; yellowing may occur.			
Hardness	ISO 868 : 2003	Shore D1	85
Glass transition temperature (Tg)	ISO 11359 : 2002	°C	65

AXSON TECHNOLOGIES
Head Office France
+33 1 34 40 34 60
axson@axson.fr
axson.fr

GERMANY
+49 60 74 40 71 10
verkauf@axson.de
axson.de

SPAIN & PORTUGAL
+34 93 225 16 20
axson@axson.es
axson.es

SLOVAKIA
+421 37 642 25 26
office@axson-ce.sk
axson-ce.sk

NORTH AMERICA
+1 517 663 8191
info@axsontech.us
axsontech.us

JAPAN
+81 564 26 25 91
sales@axson.jp
axson.jp

INDIA
+91 20 25560710
info.india@axson.com
axson.com

ITALY
+39 02 96 70 23 36
axson@axson.it
axson.it

U.K.
+44 1 638 66 00 62
sales@axson.co.uk
axson.com

MEXICO
+52 55 52 64 49 22
axson@prodigy.net.mx
axson.com.mx

CHINA
+86 21 58 68 30 37
china@axson.cn
axson.cn

MIDDLE EAST
+971 7 2432227
info.middleeast@axson.com
axson.com

PROCESSING

The resin working temperature must be between 30 to 35°C to facilitate the mixing and the vacuum degassing. If a jiffy mixer is used for mixing, then it is necessary to degas by slow agitation.
Accelerator rate according to casting thickness, reducing the yellowing and the distortion in a non-energy dissipating mould :

- from 1 mm to 20 mm: 3 % on resin only
- from 20 mm to 30 mm : 1 % on resin only
- from 30 mm to 40 mm : 0 % to 0.5% on resin only

Let hardening the system for 24 to 48 hrs at room temperature (protected from dust), according to casting thickness. Before demoulding, proceed to thermal treatment for 24hrs at 60°C

HANDLING PRECAUTIONS

In case of resin or accelerator crystallisation during storage, cure between 40 to 50°C to go back to liquid product.

To prevent from yellowing or from distortion of parts, the following parameters must be strictly respected :

- *Decrystallisation temperature of the resin must not exceed 45°C*
- *Thermal treatment does not be carried out at a temperature higher than 60°C*
- *Accelerator rate can't exceed 3%*
- *Settling time at room temperature must be followed before thermal treatment*

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 18 and 25°C.

PACKAGING

RESIN	HARDENER	ACCELERATOR
6 x 0,500 kg *1 x 5 kg* *1 x 25 kg*	*6 x 0,225 kg* *1 x 2,25 kg* *1 x 11,25 kg*	*1 x 0,090 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.

AXSON TECHNOLOGIES
Head Office France
+33 1 34 40 34 60
axson@axson.fr
axson.fr

GERMANY
+49 60 74 40 71 10
verkauf@axson.de
axson.de

SPAIN & PORTUGAL
+34 93 225 16 20
axson@axson.es
axson.es

SLOVAKIA
+421 37 642 25 26
office@axson-ce.sk
axson-ce.sk

NORTH AMERICA
+1 517 663 8191
info@axsontech.us
axsontech.us

JAPAN
+81 564 26 25 91
sales@axson.jp
axson.jp

INDIA
+91 20 25560710
info.india@axson.com
axson.com

ITALY
+39 02 96 70 23 36
axson@axson.it
axson.it

U.K.
+44 1 638 66 00 62
sales@axson.co.uk
axson.com

MEXICO
+52 55 52 64 49 22
axson@prodigy.net.mx
axson.com.mx

CHINA
+86 21 58 68 30 37
china@axson.cn
axson.cn

MIDDLE EAST
+971 7 2432227
info.middleeast@axson.com
axson.com