

DESCRIPTION

Repairing and usual bonding, maintenance, bonding of big surfaces.

PROPERTIES

- 2 component room temperature cure liquid epoxy adhesive
- Liquid product suitable for injection
- Slow setting product adapted to cover and bond wide surfaces
- Excellent mechanical performances and ageing
- Excellent strength to dynamic load (vibrations and impacts)
- Product adapted to stringent ageing and aggressive environments
- Unfilled product suitable for transparent assemblies

PHYSICAL PROPERTIES				
Composition		RESIN	HARDENER	MIXED
Mix ratio by weight		100	80	
Mix ratio by volume at 25°C		100	100	
Colour		translucent	light amber	light amber
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	110,000	12,500	30,000
Specific gravity at 25°C (g/cm ³)	ISO 1675 : 1985	1.15	0.98	1.1
Pot life at 25°C on 100 g (min)	Gel Timer TECAM			80
Open time (min)	-	-		85

THERMAL AND MECHANICAL PROPERTIES (1)			
Hardness	ISO 868 : 2003	Shore D1 / D15	75 / 73
Tensile strength	ISO 527 : 1993	MPa	24
Elongation at break	ISO 527 : 1993	%	24
Glass transition temperature (tg)	ISO 11359 : 2002	°C	55
Coefficient of thermal expansion (CTE) (+20°C to +50°C)	ISO 11359: 1999	10 ⁻⁶ K ⁻¹	140
Working temperature	-	°C	-40 ; +80

EQUIPMENT

ADEKIT 145 packaged in 50 ml and 400 ml cartridges and requires a manual or pneumatic gun. Please consult our technical department for applications needing a machine.

SUBSTRATE PREPARATION

The item to be bonded must be free of all dirt, oil or other foreign matter. A clean, dry surface is a must. Consult our Technical Support and refer to the technical data sheet about surface preparations to choose adapted degreaser or cleaner

MECHANICAL PROPERTIES ON ASSEMBLIES

Time to obtain 1 MPa lap shear strength at 25°C	ISO 4587 : 2003	hr	7
Time to obtain 50% final lap shear strength at 25°C	ISO 4587 : 2003	hr	16
Lap shear strength on aluminium	ISO 4587 : 2003	MPa	32 AF(3)
Floating roller peel resistance (2)	ISO 4578 : 1997	kN/m	4 AF
Lap shear strength after moist cataplasms 15 days at 80°C	ISO 4587 : 2003	MPa	18 AF
Lap shear strength after a thermal shock ageing cycle 15 cycles D3 (see annex)	ISO 4587 : 2003	MPa	18 AF
Lap shear strength after ageing in immersion for 3 weeks : - motor oil at 70°C - hydrochloric acid (0.1 N) at 23°C - soda (0.1 N) at 23°C - seawater at 23°C - gasoil at 23°C - gas at 23°C	ISO 4587 : 2003 ISO 175 : 1999	MPa	27 AF 25 AF 25 AF 25 AF 29 AF 25 AF
Lap shear strength after thermal ageing 3 weeks at 100°C	ISO 4587 : 2003	MPa	22 AF

(1) Lap shear strength on aluminium 2017A etched in sulfochromic bath

(2) Hardening conditions: 8 hrs at 80°C + 48 hrs at room temperature

(3) According to ISO 10365:1992 : AF = Adhesive failure

HANDLING PRECAUTIONS

It is recommended to use the product at a temperature between +18°C and +35°C. Normal health and safety precautions should be observed when handling these products :

- ensure good ventilation
- wear gloves and safety glasses
- wear waterproof clothes

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

STORAGE CONDITIONS

Shelf life of ADEKIT A145/ H9945 is 18 months stored in its original unopened packaging at a temperature between +15°C and +25°C.

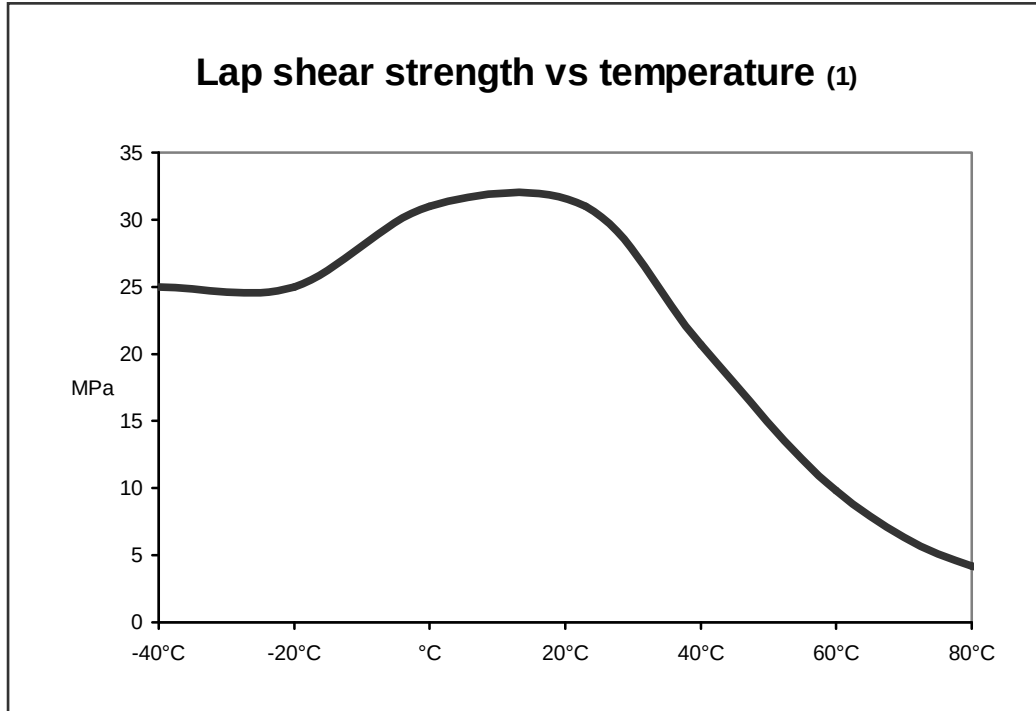
PACKAGING

A 145/50	A 145/400	H 9945
12 cartridges	12 cartridges	6 (0.5+ 04) kg (5+4)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.

ANNEX



(1)Hardening conditions: 8 hrs at 80°C + 48 hrs at room temperature

THERMAL SHOCK TEST ACCORDING TO ISO 9142 : 1993 NORM

D3 cycle

