



ADEKIT A 140 ADEKIT H 9940

STRUCTURAL EPOXY ADHESIVE
HIGH PERFORMANCES

PROPERTIES

Two-component epoxy adhesive for bonding structural assemblies which must have good peeling and ageing resistances.

APPLICATIONS

- Bonding of body de carrosserie.
- Bonding metallic structures (racing vehicles, aeronautics)
- Bonding inserts and composite structures...

PHYSICAL PROPERTIES			
	RESIN	HARDENER	MIXING
Mixing ratio by weight	100	90	
Mixing rati by volume	100	100	
Color	grey brown black	beige	beige brown black grey
Density at 25°C	1.38	1.23	1.30
Brookfield RVT viscosity (sp6 1 rpm) (Pa.s)	400	450	430
Pot life at 25°C on 100 g (GEL TIMER) (min.)	-	-	30
Open time at 25°C (min)	-	-	40

MECHANICAL PROPERTIES ON ASSEMBLIES			
Time to obtain 1 MPa lap shear strength at 25°C	ISO 4587-95	hour	4 hrs 30
Time to obtain 50% final lap shear strength at 25°C	ISO 4587-95	hour	20
Lap shear strength on aluminium (2)	ISO 4587-95	MPa	21 CF (3)
Floating roller peel resistance (2)	ISO 4578-97	kN/m	5 CF (3)

(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) CF : Cohesive failure according to ISO 10365-95 norm

EQUIPMENT

ADEKIT A140 is packaged in 50 ml and 40 ml cartridges and requires a manual or pneumatic gun. Please consult our technical department for applications needing a machine.

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.



ADEKIT A 140 ADEKIT H 9940

STRUCTURAL EPOXY ADHESIVE
HIGH PERFORMANCES

Page 1/2 02259

AXSON France
BP 444
95005 Cergy Cedex
FRANCE
Tél. (+33) 1 34 40 34 60
Fax (+33) 1 34 21 97 87
Email : axson@axson.fr

AXSON GmbH
Dietzenbach
Tél. (+49) 6074 40711-0

AXSON Italie
Saronno
Tél. (+39) 02 96 70 23 36

AXSON IBERICA
Barcelona
Tél. (+34) 93 225 16 20

AXSON UK Limited
Suffolk
Tél. (+44) 16 38 66 00 62

AXSON BRASIL
Sao Paulo
Tél. (+55) 11 4109 6445

AXSON MEXICO
Mexico DF
Tél. (+52) 5 264 4922

AXSON ASIA Ltd
Seoul
Tél. (+82) 2 599 4785

AXSON NORTH AMERICA
Eaton Rapids
Tél. (+1) 517 663 81 91



ADEKIT A 140 ADEKIT H 9940

STRUCTURAL EPOXY ADHESIVE
HIGH PERFORMANCES

MECHANICAL PROPERTIES ON ASSEMBLES			
Lap shear strength after moist cataplasms 15 days at 80°C	ISO 4587-95	MPa	20 CF(3)
Lap shear strength after a thermal shock ageing cycle 15 cycles D3 (see annex)	ISO 4587-95	MPa	20 CF
Lap shear strength after ageing in immersion for 3 weeks : <ul style="list-style-type: none"> • 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 4587-95 ISO 175-99	MPa	16 CF 17 CF 21 CF 21 CF 19 CF 21 CF
Lap shear strength after thermal ageing 3 weeks at 100°C	ISO 4587-95	MPa	21 CF

THERMAL AND MECHANICAL PROPERTIES			
Hardness	ISO 868-85	Shore D1 / D15	80 / 77
Tensile strength	ISO 527-96	MPa	30
Elongation at break	ISO 527-96	%	2
Glass transition temperature	TMA-METTLER	°C	70
Thermal coefficient of expansion (CTE) [-30;+60]°C	TMA-METTLER	10 ⁻⁶ K ⁻¹	70
Working temperature	-	°C	-40 ; +100°C

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.

PACKAGING

Black		Beige		Brown		Grey
H 9940 NR	A 140/50 NR A 140/400 NR	H 9940 BE	A 140/400 BE	H 9940 MN	A 140/50 MN	A 140/50 GS
5 + 4.5 kg 6(0.5+0.45) kg 40 + 36 kg	12 cartridges	5 + 4.5 kg	12 cartridges	40 + 36 kg	12 cartridges	12 cartridges

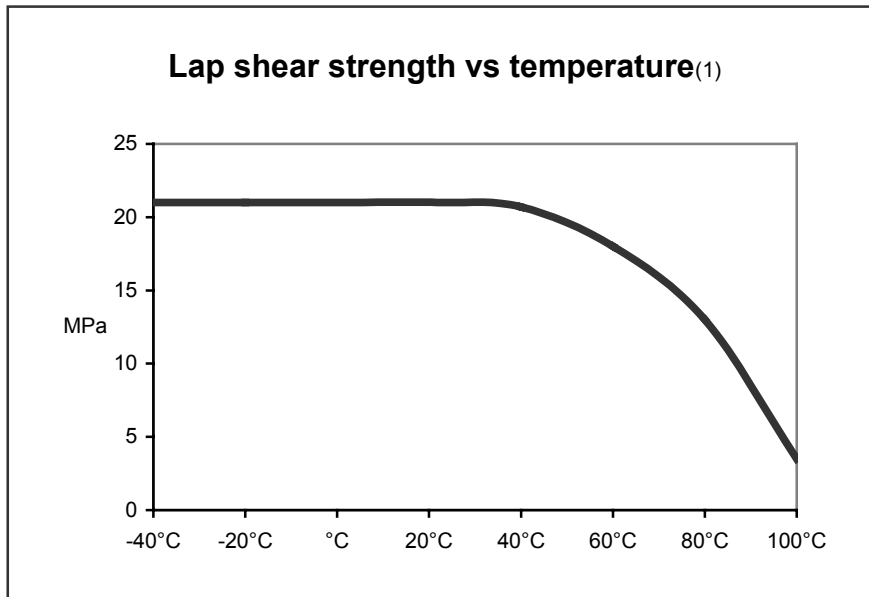
STORAGE CONDITIONS

Shelf life of ADEKIT A140 / H9940 is 12 months minimum stored in its original unopened packaging at a temperature between +15°C and +25°C.

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 hours at room temperature

THERMAL SHOCK TEST ACCORDING TO ISO 9142-93 NORM

D3 cycle

