

PRODUCT DATA SHEET

ADEKIT A175-1 / H9975-1

TWO-COMPONENT EPOXY ADHESIVE MULTIPURPOSE

DESCRIPTION

Bonding elements of metallic or composite structures, bonding car body, aeronautical application

PROPERTIES

- 2 component high performance room temperature curing Epoxy adhesive
- Non sagging pasty product suitable for vertical applications and to fill irregular joints
- Slow setting product adapted to cover and bond wide surfaces
- Excellent mechanical and thermal performances
- Excellent strength to dynamic loads (vibrations and impacts)
- Product adapted to stringent ageing and aggressive environments

PHYSICAL PROPERTIES

Composition	RESIN (A)	HARDENER (B)	MIX	METHOD
Mix ratio by weight	100	90		
Mix ratio by volume at 25 °C	100	100		
Colour	Black	Amber	Black	
Aspect	Paste	Paste	Paste	
Density at 25 °C ^(KP)	1.38	1.22	-	LT-020
Density of cured product at 23 °C	-	-	1.30	LT-047
Pot life on 100 g at 25 °C ^(KP) (min)	-	-	90	LT-002-C
Open time on 7 mm bead at 23 °C (min)	-	-	100	LT-006-B

(KP) Key properties. These values are enclosed in Certificate of Analysis.

MECHANICAL PROPERTIES ⁽¹⁾

Hardness	(Shore D)	80	LT-022
Tensile strength	(MPa)	25	ISO 527
Elongation at break	(%)	11	ISO 527
YOUNG Modulus	(MPa)	2200	ISO 527
Recommended use temperature (°C)		15 to 30	-

(1) Cured 16 hours at 70 °C

HANDLING TIME ⁽¹⁾

At 23 °C	(h)	10	LT-006-B
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(1) Handling time is defined as the time needed to obtain Lap Shear Strength on Aluminium at 23 °C, of 1 MPa.

MECHANICAL PROPERTIES ON ASSEMBLIES ⁽¹⁾

LAP SHEAR STRENGTH AT 23 °C (MPa)		METHOD
Aluminium 2017A (sandblasted)	Initial	18 CF
	After wet cataplast 7 days at 70 °C / 100 % RH	15 CF
Stainless Steel 304 (sandblasted)	Initial	19 CF
	After wet cataplast 7 days at 70 °C / 100 % RH	16 CF
Electro-galvanized Steel (sandblasted)		19 CF
Electro-galvanized Steel (acetone wipe)		19 CF
ABS (sanded + Isopropanol + plastic primer ⁽²⁾)		4 SF
PC (sanded + Isopropanol)		4 SF
PVC (sanded + Isopropanol)		7 SF
PMMA (sanded + Isopropanol + plastic primer ⁽²⁾)		5 SF
PA6E (sanded + Isopropanol)		4 SF/AF

(1) Cured 16 hours at 70 °C

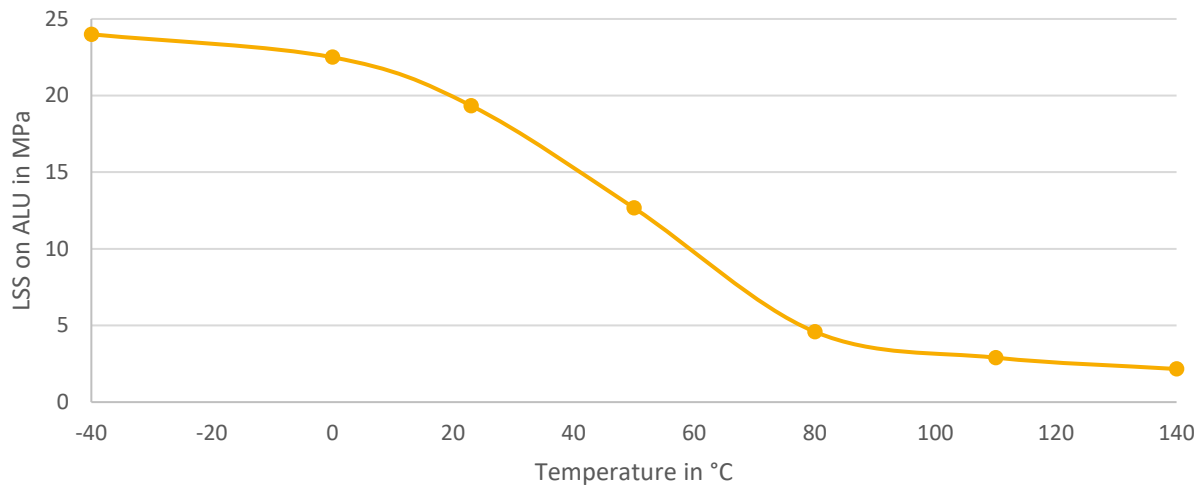
(2) Plastic sanded, Isopropanol wipe and coated with Plastic Primer 5069 from Sika Advanced Resins

AF: Adhesive Failure, SF: Substrate Failure, CF: Cohesive Failure, according to EN ISO 10365 Standard.

FLOATING ROLLER PEEL STRENGTH AT 23°C

Aluminium 2017A (sandblasted)	(kN/m)	4	ISO 4578
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Lap Shear Strength on ALU VS Temperature



PROCESSING

- **Equipment:** ADEKIT A 175-1 packaged in 400 ml cartridges require 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 about surface preparations.

HANDLING PRECAUTIONS

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

- Ensure good ventilation.
- Wear gloves, glasses and protective clothes.

For further information, please consult the Safety Data Sheet.

STORAGE CONDITIONS

Shelf life of **ADEKIT A175-1** is **12 months** in a dry place and in original unopened containers at a temperature between 15 °C and 25 °C.

Shelf life of **ADEKIT H9975-1 RESIN and ADEKIT H9975-1 HARDENER** is **12 months** in a dry place and in original unopened containers at a temperature between 15 °C and 25 °C.

PACKAGING

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|--------------------|----------------------|
| ▪ A 175-1 / 400ml | Box of 12 cartridges |
| ▪ H 9975-1 Resin | 16 kg, 41 kg |
| ▪ H9975-1 Hardener | 14 kg, 36 kg |

FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Advanced Resins. Copies of the following publications are available on request: Safety Data Sheets.

VALUE BASES

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

HEALTH AND SAFETY INFORMATION

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

LEGAL NOTICE

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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