

# ADEKIT A 170-1

BUILDING TRUST



## THIXOTROPIC STRUCTURAL EPOXY ADHESIVE

### Temporary Technical Data Sheet

## DESCRIPTION

Bonding of elements of metallic or composite structures, bonding of car body, aeronautic applications.

## PROPERTIES

- 2 component high performance room temperature cured epoxy adhesive
- Suitable for edgewise assemblies
- Slow setting product adapted to cover and bond wide surfaces
- Excellent mechanical and thermal performances up to 100°C
- Excellent strength to dynamic loads (vibrations and impacts)
- Product adapted to stringent ageing and aggressive environments

PHYSICAL PROPERTIES				
Composition	RESIN	HARDENER	MIX	METHOD
Mix ratio by weight	100	100		
Mix ratio by volume at 25°C	100	100		
Colour	Black	Grey	Black (BK)	
Density at 25°C <sup>(KP)</sup>	1.23	1.28	-	LT-020
Density of cured product at 23°C	-	-	1.23	ISO 2781
Pot life on 100g at 23°C, min <sup>(KP)</sup>	-	-	27	LT-002-B
Open Time on 7 mm bead at 23°C, min	-	-	60	LT-006-B

(KP): Key Properties. These values are enclosed in Certificate Of Analysis.

## MECHANICAL PROPERTIES

Hardness, Shore D* <sup>(KP)</sup>	84	LT-022
Tensile strength, MPa **	30	ISO 527-2
Elongation at break, % **	7	
YOUNG Modulus **	1900	
Recommended use temperature, °C	15 - 35	-
Working temperature, °C ***	-40 - 100	LT-006-B

\*Cured 2h at 80°C.

\*\*Cured 16h at 70°C.

\*\*\* Working temperature is defined as the temperature at which product keeps 80% of its initial Lap Shear Strength after 1000 hours ageing at this temperature, value on Aluminium, measured at 23°C.

# ADEKIT A 170-1

BUILDING TRUST



## THIXOTROPIC STRUCTURAL EPOXY ADHESIVE

### Temporary Technical Data Sheet

#### HANDLING TIME

Handling Time			
At 23°C	5h30	h/min	LT-006-B
At 40°C	1h05	h/min	
At 60°C	30	min	

Handling time is defined as the time needed to obtain Lap Shear Strength on Aluminum at 23°C, of 1MPa.

#### MECHANICAL PROPERTIES ON ASSEMBLIES (Cured 16H at 70°C)

Lap Shear Strength at 23°C			
Aluminium 2017A sandblasted	Initial	23 SCF/AF	MPa LT-006-B
	After wet cataplasme 7 days 70°C/100% RH	22.5 AF	
Stainless Steel 304 sandblasted	Initial	25 AF	
	After wet cataplasme 7 days 70°C/100% RH	22.5 AF	
Electro-galvanized Steel sandblasted		22 SCF	
Electro-galvanized Steel Acetone wipe		19 AF	
ABS Sanded + Isopropanol		3.5 SF	
PC Sanded+Isopro+Plast.prim*		1.5 AF	
PVC Sanded + Isopropanol		6.5 SF	
PMMA Sanded+Isopro+Plast.prim*		2 AF	
PA6E Sanded+Isopro+Plast.prim*		3 AF	

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

\*Plastics sanded, Isopropanol wiped and coated with Plastic primer 5069 from Sika Advanced Resins.

Floating roller peel strength at 23°C				
Aluminum 2017A sandblasted		5	kN/m	ISO 4578

# ADEKIT A 170-1

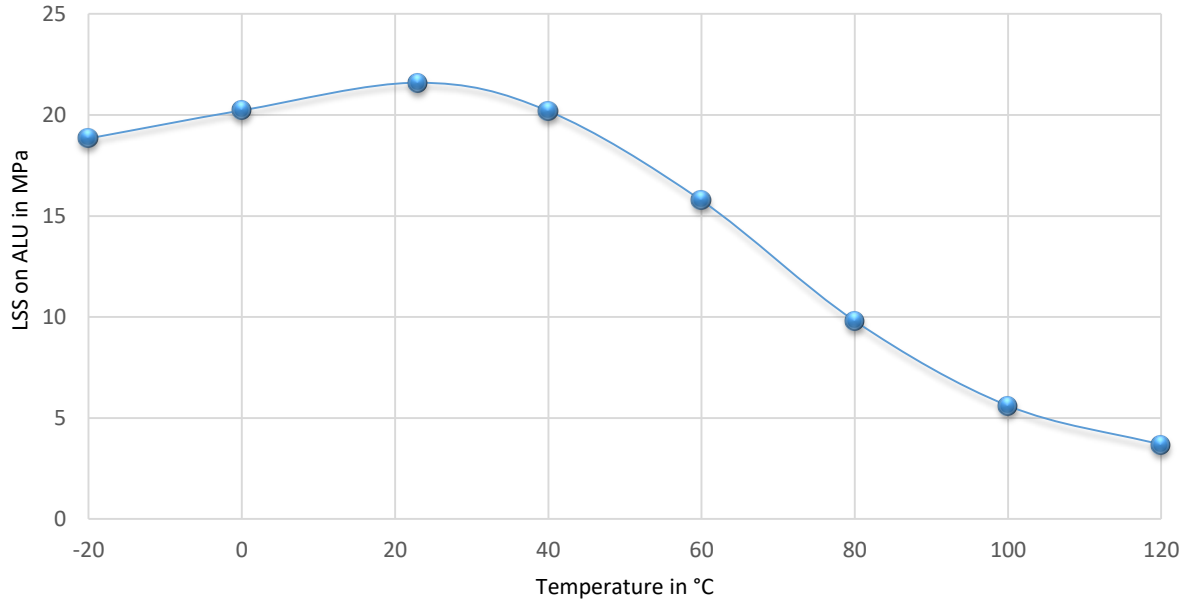
BUILDING TRUST



## THIXOTROPIC STRUCTURAL EPOXY ADHESIVE

### Temporary Technical Data Sheet

### Lap Shear Strength on ALU versus Temperature



## EQUIPMENT

ADEKIT 170-1 is packaged in 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 to choose adapted degreaser or cleaner

Sika Automotive France SAS –  
Sika Advanced Resins  
Head Office France  
+33 1 34 40 34 60  
[advanced.resins@fr.sika.com](mailto:advanced.resins@fr.sika.com)  
[www.sikaadvancedresins.com](http://www.sikaadvancedresins.com)  
[www.sikaadvancedresins.fr](http://www.sikaadvancedresins.fr)

GERMANY  
+49 (0)7125 940 492  
[tooling@de.sika.com](mailto:tooling@de.sika.com)  
[www.sikaadvancedresins.de](http://www.sikaadvancedresins.de)

SPAIN  
+34 93 225 16 20  
[spain@axson.com](mailto:spain@axson.com)  
[www.sikaadvancedresins.es](http://www.sikaadvancedresins.es)

SLOVAKIA  
+421 37 642 25 26  
[axson.sk@axson.com](mailto:axson.sk@axson.com)  
[www.sikaadvancedresins.sk](http://www.sikaadvancedresins.sk)

USA  
+1 248 588 2270  
[axsonmh@axson.com](mailto:axsonmh@axson.com)  
[www.sikaadvancedresins.us](http://www.sikaadvancedresins.us)

JAPAN  
+81 564 26 25 91  
[sales.japan@axson.com](mailto:sales.japan@axson.com)  
[www.sikaadvancedresins.jp](http://www.sikaadvancedresins.jp)

INDIA  
+91 20 25560710  
[info.india@axson.com](mailto:info.india@axson.com)  
[www.sikaadvancedresins.in](http://www.sikaadvancedresins.in)

ITALY  
+39 02 96 70 23 36  
[axson@axson.it](mailto:axson@axson.it)  
[www.sikaadvancedresins.it](http://www.sikaadvancedresins.it)

U.K.  
+44 1 638 66 00 62  
[sales.uk@axson.com](mailto:sales.uk@axson.com)  
[www.sikaadvancedresins.uk](http://www.sikaadvancedresins.uk)

MEXICO  
+52 55 52 64 49 22  
[marketing@axson.com.mx](mailto:marketing@axson.com.mx)  
[www.sikaadvancedresins.mx](http://www.sikaadvancedresins.mx)

CHINA  
+86 21 58 68 30 37  
[marketing\\_china@axson.com](mailto:marketing_china@axson.com)  
[www.sikaadvancedresins.cn](http://www.sikaadvancedresins.cn)

# ADEKIT A 170-1

BUILDING TRUST



## THIXOTROPIC STRUCTURAL EPOXY ADHESIVE

### Temporary Technical Data Sheet

## HANDLING PRECAUTIONS

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 A 170-1 is **12 months** stored in its original unopened packaging at a temperature between +15°C and +25°C.

## PACKAGING

A170-1 / 400ml

Box of 12 cartridges

## GUARANTEE

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.

Sika Automotive France SAS –  
Sika Advanced Resins  
Head Office France  
+33 1 34 40 34 60  
[advanced.resins@fr.sika.com](mailto:advanced.resins@fr.sika.com)  
[www.sikaadvancedresins.com](http://www.sikaadvancedresins.com)  
[www.sikaadvancedresins.fr](http://www.sikaadvancedresins.fr)

GERMANY  
+49 (0)7125 940 492  
[tooling@de.sika.com](mailto:tooling@de.sika.com)  
[www.sikaadvancedresins.de](http://www.sikaadvancedresins.de)

SPAIN  
+34 93 225 16 20  
[spain@axson.com](mailto:spain@axson.com)  
[www.sikaadvancedresins.es](http://www.sikaadvancedresins.es)

SLOVAKIA  
+421 37 642 25 26  
[axson.sk@axson.com](mailto:axson.sk@axson.com)  
[www.sikaadvancedresins.sk](http://www.sikaadvancedresins.sk)

USA  
+1 248 588 2270  
[axsonmh@axson.com](mailto:axsonmh@axson.com)  
[www.sikaadvancedresins.us](http://www.sikaadvancedresins.us)

JAPAN  
+81 564 26 25 91  
[sales.japan@axson.com](mailto:sales.japan@axson.com)  
[www.sikaadvancedresins.jp](http://www.sikaadvancedresins.jp)

INDIA  
+91 20 25560710  
[info.india@axson.com](mailto:info.india@axson.com)  
[www.sikaadvancedresins.in](http://www.sikaadvancedresins.in)

ITALY  
+39 02 96 70 23 36  
[axson@axson.it](mailto:axson@axson.it)  
[www.sikaadvancedresins.it](http://www.sikaadvancedresins.it)

U.K.  
+44 1 638 66 00 62  
[sales.uk@axson.com](mailto:sales.uk@axson.com)  
[www.sikaadvancedresins.uk](http://www.sikaadvancedresins.uk)

MEXICO  
+52 55 52 64 49 22  
[marketing@axson.com.mx](mailto:marketing@axson.com.mx)  
[www.sikaadvancedresins.mx](http://www.sikaadvancedresins.mx)

CHINA  
+86 21 58 68 30 37  
[marketing\\_china@axson.com](mailto:marketing_china@axson.com)  
[www.sikaadvancedresins.cn](http://www.sikaadvancedresins.cn)