

**BUILDING TRUST** 

# PRODUCT DATA SHEET

# ADEKIT A 230 BG / H 6230 GY POLYOL / H 6230 ISOCYANATE

# TWO COMPONENT POLYURETHANE ADHESIVE

### DESCRIPTION

Bonding of composite parts (RTM, SMC, Wet lay up laminate ...) and metallic structures. The adhesive is a chemical thixotropy system suitable for equipment with pressurized tanks or by gravity.

### PROPERTIES

- 2 components high performance room temperature cured polyurethane adhesive
  Non sagging paste product suitable for vertical applications and to fill irregular joints
  Excellent mechanical and thermal performances up to 130°C
  Excellent strength to dynamic loads (vibrations and impacts)
- Fast curing time.

- and impacts)Product adapted to stringent ageing and
- aggressive environments

## PHYSICAL PROPERTIES

Composition Mix ratio by weight Mix ratio by volume at 25 °C		POLYOL	ISOCYANATE	MIX	METHOD	
		100	78			
		100	100			
Colour		Grey beige (GY)	Dark amber	Beige (BG)		
Density at 25 °C <sup>(KP)</sup>		1,48	1,15	-	LT-020-A	
Density of cured product at 23	°C	-	-	1,34	ISO 2781	
Viscosity at 25 °C <sup>(KP)</sup>	(Pa.s)	15-20	6-8	Paste	LT-001	
Pot life on 50g at 23 °C <sup>(KP)</sup>	(min)	-	-	6	LT-002-B	
Open time on 7mm bead at 23 °C	(min)	-	-	10	LT-006-B	

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

## MECHANICAL PROPERTIES<sup>(1)</sup>

Hardness	(Shore D)	70	ISO 868
Tensile strength	(MPa)	14	ISO 527-2
Elongation at break	(%)	30	ISO 527-2
YOUNG Modulus	(MPa)	200	ISO 527-2
Recommended use temperature (°C)		15 to 25	
Working temperature <sup>(2)</sup>	(°C)	-40 to 130	LT-006-B
(1) Cured 16 hours at 70°C			

Cured 16 hours at 70°C

(2) 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.

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# HANDLING TIME (1)

At 23 °C	(min)	35	
At 40 °C	(min)	20	LT-006-B
At 60 °C	(min)	10	

(1) Handling time is defined as the time needed to obtain Lap Shear Strength on Aluminium at  $23^{\circ}$ C, of 1 MPa.

# MECHANICAL PROPERTIES ON ASSEMBLIES <sup>(1)</sup>

		LAP SHEAR STRENGTH AT 23°C (MPa)		METHOD
Aluminium 2017A		Initial	17 CF	
Aluminium 2017A (sandblasted)	(MPa)	After wet cataplasm 7 days at 70°C / 100% RH	7 AF	
(saliublasted)		After 15 cycles D3 <sup>(2)</sup>	15 SCF/CF	
Stainless Steel 304		Initial	18 CF	
(sandblasted)		After wet cataplasm 7 days at 70°C / 100% RH	12 AF	
Electro-galvanized Steel (sandblasted)			15 SCF	
Electro-galvanized Steel (acetone wiped)			15 SCF/AF	
ABS			4 SF	
(sanded + Isopropanol)				
PC			4 SF	LT-006-B
(Isopropanol wiped)	——(MPa)			
PVC	(WF 8)		5 SF	
(sanded + Isopropanol)				
PMMA	—		5 SF	
(sanded + Isopropanol)				
PA6A			2,5 SCF	
(sanded + Isopropanol)				
GFR Polyester			10 DF	
(Isopropanol wiped)				
GFR Epoxy			22,5 CF	
(Isopropanol wiped)				

(1) Cured 16 hours at 70°C

(2) Cycle D3 : exposition cycle in the heat, in the cold and in the humidity according to ISO 9142 standard.

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

# FLOATING ROLLER PEEL STRENGTH AT 23°C

Aluminium 2017A	(KN/m)	C F	ISO 4578
(sandblasted)	(KN/III)	0,5	





# Lap Shear Strength on Aluminium versus Temperature

### PROCESSING

- Equipment: ADEKIT A 230 BG packaged in 400 ml cartridges and 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 A 230 BG** is **9 months** in a dry place and in original unopened containers at a temperature between 15 and 25° C.

Shelf life of **ADEKIT H 6230 GY ISOCYANATE** is **9 months** in a dry place and in original unopened containers at a temperature between 15 and 25° C.

Shelf life of **ADEKIT H 6230 POLYOL** is **9 months** in a dry place and in original unopened containers at a temperature between 15 and 25° C.

### PACKAGING

- A 230 BG / 400 ml
- H 6230 GY POLYOL & H 6230 ISOCYANATE

Box of 12 cartridges Please consult our Sales Department

### FURTHER INFORMATION

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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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