

## TECHNICAL DATA SHEET

# Adekit A 236 with -25 minute (Fast) or -125 minute (Slow) hardeners

## POLYURETHANE ADHESIVE SYSTEM FOR LARGE COMPOSITE PARTS BONDING



### DESCRIPTION

Bonding of large composite parts (RTM, SMC, GRP, Laminate), metallic structures, plywood for application requiring high performances and flexibility in transport industries (truck, bus) and Marine (hull bonding, deck bonding, interior design). **Two cure speeds available : Adekit A 236 – 25 (25 minute) and Adekit A 236 – 120 (120 minute).**

### PROPERTIES

- Non sagging paste product with gap fill up to 30mm in vertical and ceiling application; 60mm in horizontal
- **Two separate cured color options/mixing colors depending on system used (25 minute or 120 minute).**
- Excellent strength to dynamic loads (vibration and impact)
- Odor and solvent free
- Long open time with reduced handling time
- Usable with pneumatic dispensing guns
- Comes in 400 ml, 600 ml cartridges or drum units

### PHYSICAL PROPERTIES (Adekit A 236-25)

| Composition                  | Adekit A 236-25 |                   | Adekit A 236-25 | MIXED      |
|------------------------------|-----------------|-------------------|-----------------|------------|
|                              |                 | Polyol            | Isocyanate      |            |
| Mix ratio by weight          |                 | 92                | 100             |            |
| Mix ratio by volume at 25 °C |                 | 100               | 100             |            |
| Aspect                       |                 | Paste             | Paste           | Paste      |
| Color                        |                 | Black             | Beige           | Light Gray |
| Viscosity 25 °C              | (25°C)          | 160,000 – 260,000 | 40,000 – 70,000 | Paste      |
| Density at 25 °C             | lbs./gal        | ASTM D792         | (10.7)          | (11.2)     |
|                              | (g/cc)          |                   | 1.29            | 1.40       |
| Pot life (50 g.)             | (minutes)       | Brookfield        |                 | 25 - 35    |
| Sag on 40 mm bead            |                 |                   |                 | < 5%       |

### TECHNICAL DATA SHEET

Adekit A 236  
February 19, Version 03 /2019

## PHYSICAL PROPERTIES (Adekit A 236-120)

| Composition                  |                    | Adekit A 236-120      | Adekit A 236-120   | MIXED              |
|------------------------------|--------------------|-----------------------|--------------------|--------------------|
|                              |                    | Polyol                | Isocyanate         |                    |
| Mix ratio by weight          |                    | 92                    | 100                |                    |
| Mix ratio by volume at 25 °C |                    | 100                   | 100                |                    |
| Aspect                       |                    | Paste                 | Paste              | Paste              |
| Color                        |                    | Blue                  | Beige              | Light Green        |
| Viscosity 25 °C              | (25°C)             | 300,000 – 400,000     | 40,000 – 70,000    | Paste              |
| Density at 25 °C             | lbs./gal<br>(g/cc) | ASTM D792<br><br>1.29 | (10.7)<br><br>1.40 | (11.2)<br><br>1.34 |
| Pot life (50 g.)             | (minutes)          | Brookfield            |                    | 90 - 120           |
| Sag on 40 mm bead            |                    |                       |                    | < 5%               |

## MECHANICAL PROPERTIES at 23 °C (Adekit A 236-25 & A 236-120)

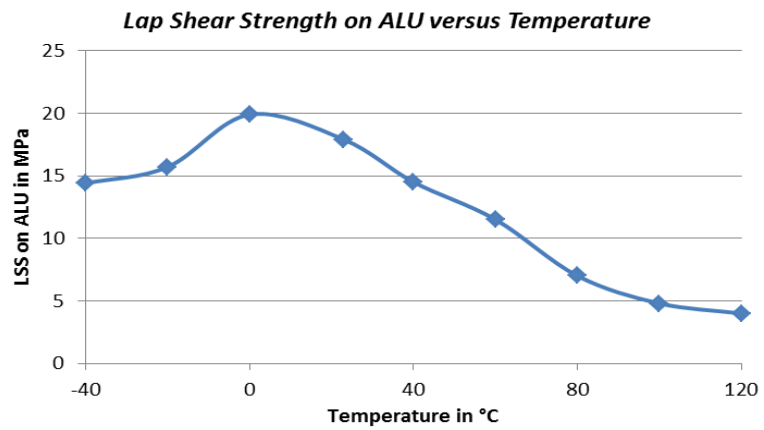
|                             |   |           |
|-----------------------------|---|-----------|
| Hardness (Shore D)*         | ASTM D-2240   | 55-60     |
| Tensile Strength (psi)**    | ASTM D-638  | 1,740     |
| Elongation at break (%)**   |   | 60        |
| Tensile Modulus (psi)       | ASTM D-636  | 12,000    |
| Working Temperature (°C)*** | (80% lap shear retention on aluminium after 1000 hours) | -40 - 120 |

\*Cured 24hr at 23°C

\*\*Cured 16Hr at 104°F (40°C)

\*\*\*80% lap shear strength retention on aluminum

---



| <b>Mechanical Properties On Assemblies (Cured 16H at 70°C)</b> |                                  |                     |
|--|----------------------------------|---------------------|
| <b>Lap Shear Strength at 23°C</b>                              |                                  |                     |
| <u>Substrate Type/Condition</u>                                | <u>*Lap Shear Strength (Psi)</u> | <u>Failure Mode</u> |
| Aluminum 2017 A - Sandblasted                                  | 2,318                            | CF/SCF              |
| Stainless steel 304 - Sandblasted                              | 2,188                            | SCF                 |
| Electro galvanized steel - Sandblasted                         | 1,884                            | AF                  |
| Electro galvanized steel - Acetone wipe                        | 2,391                            | CF                  |
| ABS - Sanded + Isopropanol wipe                                | 435                              | SF                  |
| PC – Sanded + Isopropanol + Primer**                           | 363                              | AF                  |
| PVC – Sanded + Isopropanol + Primer**                          | 725                              | SF                  |
| PMMA - Sanded + Isopropanol wipe                               | 725                              | SF                  |
| PA6E - Sanded + Isopropanol + Primer**                         | 362                              | SF                  |
| GFR Polyester – Isopropanol wipe                               | 1,159                            | DF                  |

CF: Cohesive Failure    AF: Adhesive Failure    SCF: Special Cohesive Failure  
SF: Substrate Failure    DF: Delamination Failure    \*\*Sika Advanced Materials Primer

## 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. Please consult our Technical Support and refer to the technical data sheet about surface preparations to choose adapted degreaser or cleaner. Wet Lay- up Polyester or Vinyl ester must be primed or grinded prior to bonding. Infused Polyester or Vinyl ester: remove the peel ply just before bonding.

## Equipment

ADEKIT A236-25 and A236-120 packaged in 400 ml cartridges require a pneumatic gun. Please consult our technical department for applications needing a machine.

## 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 Sheets.

## STORAGE CONDITIONS

---

- Product shelf life of Adekit A236-25 and Adekit A236-120 resin and hardner is 9 months when stored in original unopened containers between 65 – 77°F (15 – 25°C).

## PACKAGING

---

Packaging information on request, please contact your local sales representative or find your local contact on [www.sikaadvancedresins.us](http://www.sikaadvancedresins.us)

## 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.



**Chemical**<sup>TM</sup>  
**Concepts**

Our expertise is your solution.

chemical-concepts.com

**800.220.1966**

410 Pike Road • Huntingdon Valley, PA 19006

---

## CONTACT – ADVANCED RESINS

---

### GERMANY

Stuttgarter Straße 139  
72574 Bad Urach – GERMANY  
Tel.: (+49) 7 125 940 492  
Fax.: (+49) 7 125 940 401  
E-mail: tooling@de.sika.com  
Website: www.sikaadvancedresins.de

### FRANCE

ZI des Béthunes - 15, Rue de l'Equerre  
95310 Saint-Ouen-l'Aumône  
CS 40444  
95005 CERGY PONTOISE Cedex – FRANCE  
Tel.: (+33) 1 344 034 60  
Fax: (+33) 1 342 197 87  
E-mail: advanced.resins@fr.sika.com  
Website: www.sikaadvancedresins.fr

### SPAIN

Polígono Industrial Congost - Guardaagullés, 8  
08520 LES FRANQUESES DEL VALLES – SPAIN  
Tel.: (+34) 932 25 16 20  
E-mail: spain@axson.com  
Website: www.sikaadvancedresins.es

### ITALY

Via Morandi 15  
21047 Saronno (Va) – ITALY  
Tel.: (+39) 02 9670 2336  
Fax: (+39) 02 9670 2369  
E-mail: axson@axson.it  
Website: www.sikaadvancedresins.it

### UNITED KINGDOM

Unit 15 Studlands Park Ind. Estate  
Newmarket Suffolk, CB8 7AU – UNITED KINGDOM  
Tel.: (+44) 1638 660 062  
Fax: (+44) 1638 665 078  
E-mail: sales.uk@axson.com  
Website: www.sikaadvancedresins.uk

### SLOVAKIA

Tovarenska 49  
95301 ZLATE MORAVCE – SLOVAKIA  
Tel: (+421) 376 422 526  
Fax: (+421) 376 422 527  
E-mail: axson.sk@axson.com  
Web site: www.sikaadvancedresins.sk

### UNITED STATES

30800 Stephenson Highway  
Madison Heights, Michigan 48071 – USA  
Tel.: (+1) 248 588-2270  
Fax: (+1) 248 577-0810  
E-mail: axsonmh@axson.com  
Web site: www.sikaadvancedresins.us

### MEXICO

Ignacio Ramírez #20  
Despacho 202 Col. Tabacalera  
C.P. 06030 CDMX – MEXICO  
Tel.: (+52) 55 5264 4922  
Fax: (+52) 55 5264 4916  
E-mail: marketing@axson.com.mx  
Website: www.sikaadvancedresins.mx

### CHINA

N°53 Tai Gu Road  
Wai Gao Qiao  
Free Trade Zone, Pudong  
200131 Shanghai – CHINA  
Tél.: (+86) 21 5868 3037  
Fax: (+86) 21 5868 2601  
E-mail: marketing.china@axson.com  
Website: www.sikaadvancedresins.cn

### JAPAN

2-5-12 Onishi Okazaki Aichi  
444-0871 – JAPAN  
Tel.: (+81) 564 26 2591  
Fax: (+81) 564 26 2593  
E-mail: sales.japan@axson.com  
Website: www.sikaadvancedresins.jp

### INDIA

Office n°8, Building Symphony C - 3rd Floor  
Range Hills Road  
Bhosale Nagar  
PUNE 411 020 – INDIA  
Tel: (+ 91) 20 25 56 07 10  
Fax: (+ 91) 20 25 56 07 12  
E-mail: info.india@axson.com  
Website: www.sikaadvancedresins.in

---

## TECHNICAL DATA SHEET

Adekit A 236

February 19, Version 03 /2019