

## Epoxy Adhesive

### PRODUCT DESCRIPTION

ST1621 is a two component epoxy adhesive used for maintenance, reparability and glying of materials (on metals, glass, wood, plastics, etc.).

ST1621 is compliance with REACH and RoHS regulations. If you want a certificate, please contact us ([info@abchimie.com](mailto:info@abchimie.com)).

### FEATURES

- Two-component room temperature curing Epoxy adhesive
- Liquid product suitable for injection
- Fast setting product adapted to reduce assembly time
- Excellent mechanical performances

### APPLICATION

ST1621 is packaged in 50 ml cartridges and requires a manual or pneumatic gun. ST1621 is also proposed on kit for industrial application with machins.

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.

### PREPARATION OF THE SUPPORT

The item to be bonded must be free of all dirt, oil or other foreign matter. A clean, dry surface is a must.

### CLEANING

To clean equipment or clean uncured ST1621, we recommend using SND or ABclean (ABchimie's solvents).

## PROPERTIES

<b>PHYSICAL PROPERTIES</b>			
Composition	Resin (part A)	Hardener (part B)	MIX
Mix ratio by weight	100	100	
Mix ratio by volume at 25°C	100	100	
Color	White	Clear yellow	Clear amber
Density at 25°C	1.15	1.15	1.15
Viscosity at 25°C (Pa.s)	60	30	45
Pot life on 100g at 25°C (min)			4'15 – 6'
Open time on 7mm bead at 23°C (min)			5 -6

<b>MECHANICAL PROPERTIES<sup>1</sup></b>		
Property	Value	Method
Hardness (Shore D)	73	
Tensile strength (MPa)	54	ISO 527
Elongation at break (%)	3.5	ISO 527
Young modulus (MPa)	3 400	ISO 527
Recommended use temperature (°C)	15 to 25	
Working temperature <sup>2</sup> (°C)	-14 to 120	

(1) 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.

Handling time (time needed to obtain Lap Shear Strength on Aluminium at 23 °C, of 1 MPa) is **12 minutes**.

<b>MECHANICAL PROPERTIES ON ASSEMBLIES<sup>1</sup></b>		
	<b>LAP SHEAR STRENGTH at 23°C (MPa)</b>	
Aluminium 2017A (sandblasted)	<i>Initial</i>	<b>17.5 AF</b>
	<i>After wet cataplast 7 days at 70°C / 100% RH</i>	<b>14 AF</b>
	<i>After 15 cycles D3<sup>2</sup></i>	<b>14 AF</b>
Stainless Steel 304 (sandblasted)	<i>Initial</i>	<b>20 AF</b>
	<i>After wet cataplast 7 days at 70°C / 100% RH</i>	<b>17 AF</b>
Electro-galvanized Steel (sandblasted)		<b>17.5 AF</b>
Electro-galvanized Steel (acetone wipe)		<b>11.5 AF</b>
ABS (sanded + Isopropanol)		<b>3.5 SF</b>
PC (sanded + Isopropanol)		<b>4 SF</b>
PVC (sanded + Isopropanol)		<b>5 SF</b>
PMMA (sanded + Isopropanol)		<b>4 SF</b>
PA6E (sanded + Isopropanol + Plastic Primer) <sup>3</sup>		<b>2 AF</b>
GFR Polyester (Isopropanol wipe)		<b>7 DF</b>
GFR Epoxy (Isopropanol wipe)		<b>13 AF</b>

(1) Cured 16 hours at 70 °C

(2) Cycle D3 : 16 h at 40 °C/95 % RH + 3 h at -20 °C + 5 h at 70 °C/50 % ± 5 % RH

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

AF: Adhesive Failure, SF: Substrate Failure, DF: Delamination Failure, according to EN ISO 10365 Standard

<b>FLOATING ROLLER PEEL STRENGTH at 23°C</b>		
	Value	Method
Aluminium 2017A (sandblasted) kN/m	1.5	ISO 4578

### **PACKAGING:**

#### ***ST1621***

50mL Cartridge (box with 12)  
 Kit 1kg (05kg+ 0.5kg)  
 Kit 68kg (34kg+ 34kg)

### **REFERENCES**

ST1621 / S50  
 ST1621 K01K  
 ST1621 K68K

#### ***Cleaner***

Bulk 5 litres - SND  
 Bulk 5 litres - ABclean

SND 05 L  
 ABclean 05 L

### **STORAGE AND SHELF LIFE:**

Storage temperature: Between 15 °C and 25° C in a dry place and in original unopened containers.

Shelf life: 12 months after the date of manufacturing

*All information is given in good faith but without warranty. Properties are given as a guide only and should not be taken as a specification. ABchimie cannot be held responsible for the performance of its products within any application determined by the customer, who must satisfy themselves as to the suitability of the product.*