



BUILDING TRUST



Akabond 621

Technical Data Sheet EPOXY ADHESIVE

Wood and Stone adhesive, Thixotropic

DESCRIPTION

Akabond 621 is a thixotropic, clear two-part epoxy adhesive for use with light colored natural stones on both interior and exterior applications. It is good for stone repair, bonding together horizontal pieces, and filling cracks and holes. Stone dust can be added to Akabond 621 the mixture to make a resin mortar that is suitable for filling large areas. The Akabond 621 is not U.V. stable and will yellow in time in outdoor conditions. If non-yellowing is important to application, dark color pigments will help cover this yellowing effect if they are used in application.

PROPERTIES

- Exceptional adhesion
- Bonds stone to concrete, glass, metal, wood
- Solvent free
- Excellent freeze-thaw durability
- Sag resistant
- Excellent finishing
- Easy to use
- Low moisture absorption
- Structural repairs
- High viscosity (Good sag resistance)

PHYSICAL PROPERTIES

		Akabond 621 Resin	Akabond 621 Hardener	Mixed Akabond 621 System
Composition		Epoxy	Amine	
Mix ratio – by wt.		100	50	2/1
by volume		100	50	2/1
Aspect		Thixotropic paste	Thixotropic paste	Thixotropic paste
Color		Off white - clear	Off white - clear	Off White - clear
Viscosity – Brookfield (Sp. 7 @ 10)	Cps.	140,000 – 240,000	150,000 – 250,000	140,000 – 250,000
Density at 77°F (25°C)	lbs./gal (g/cc)	9.5 – 9.9	8.9 – 9.0	
Pot life (150 g) at 77°F (25°C)	Minutes			17 - 23
Hardening Time at 77°F (25°C)	Hours			6 - 8

PROCESSING CONDITIONS

Mix thoroughly until color is uniformly blended. Scrape the sides of mixing cup well when mixing. Ambient temperature effects the curing and working time. Warmer temperatures speed the curing process and lesson the working time. At 20°C (68°F) the mixture is workable for about 20 – 35 minutes. The minimum application temperature is 5°C (40°F). The product should not be worked once the gelling has begun. Once product becomes rubbery, excess material may be removed with a razor blade. Ratio is two parts resin to one part hardener. Failure to mix correctly will affect performance of the adhesive.

SURFACE PREPARATION and APPLICATION

Surfaces should be dry and free of grease, oil, efflorescence and dust. Akabond 621 will bond to moist surfaces, however, a dry surface will provide the best results. When bonding stones, clamps and jigs should be used to insure that a thin bond line less than .4mm (.015 inch) is achieved, thereby providing the strongest bond. After curing, the stone piece may be further processed without damage. Akabond 621 can be colored to match any stone using color pastes. Note as stated above, some yellowing does occur in the cured system in time in outdoor conditions. The best shade can be obtained by mixing the product to a shade slightly darker that the actual stone color.

SikaAxson US
+1 248 588 2270
axsonmh@axson.com
sikaaxson.us

CHINA
+86 21 58 68 30 37
marketing.china@axson.com
MEXICO
+52 55 52 64 49 22
marketing@axson.com.mx

FRANCE
+33 1 34 40 34 60
axson@axson.com
SLOVAKIA
+42 1 76 42 25 26
axson.sk@axson.com

INDIA
+91 20 25 56 07 10-11
info.india@axson.com
SPAIN
+34 9 32 25 16 20
spain@axson.com

ITALY
+39 02 96 70 23 36
axson@axson.it
U.K.
+44 16 38 66 00 62
sales.uk@axson.com

JAPAN
+81 5 64 26 25 91
sales.japan@axson.com

SIKA GERMANY –
SikaAxson
+49 7125 940 492
tooling@de.sika.com
www.sikaaxson.de



BUILDING TRUST



Akabond 621

Technical Data Sheet EPOXY ADHESIVE

Wood and Stone adhesive, Thixotropic

MECHANICAL AND THERMAL PROPERTIES*

Property	Test Method	Units(s)	Test Results
Hardness	ASTM D-2240	Shore D	84
Flexural strength	ASTM D-790	psi (MPa)	10,500 (72)
Flexural modulus	ASTM D-790	psi (MPa)	459,400 (3,170)
Tensile strength	ASTM D-638	psi (MPa)	6,300 (43)
Tensile modulus	ASTM D-638	psi (MPa)	592,300 (4,087)
Compressive strength	ASTM D-695	psi (MPa)	14,400 (99)
Compressive modulus	ASTM D-695	psi (MPa)	375,200 (2,589)
Peak service temperature		°F (°C)	160 (71)

*Cure schedule: 7 days/77°F (25°C)

STORAGE CONDITIONS

- Product shelf life of resin and hardener is 12 months when stored in original unopened containers between 65 – 77°F (15 – 25°C). Any opened can must be tightly closed.

HANDLING PRECAUTIONS

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

- Ensure good ventilation
- Wear gloves, and safety glasses.

For further information, please consult the material safety data sheet.

DISCLAIMER

The information contained in this technical data sheet results from research and tests conducted in our laboratories under precise conditions. Seller cannot anticipate all conditions under which seller's products, or the products of other manufacturers in combination with seller's products, may be used. It is the responsibility of the user to determine the suitability of the SikaAxson's products, under their own conditions, before commencing with the proposed application. In no event shall SikaAxson US be liable for any direct, indirect, punitive, incidental, special, and/or consequential damages, to property or life, whatsoever arising out of or connected with the use or misuse of our products.

SikaAxson US
+1 248 588 2270
axsonmh@axson.com
sikaaxson.us

CHINA
+86 21 58 68 30 37
marketing.china@axson.com
MEXICO
+52 55 52 64 49 22
marketing@axson.com.mx

FRANCE
+33 1 34 40 34 60
axson@axson.com
SLOVAKIA
+42 1 76 42 25 26
axson.sk@axson.com

INDIA
+91 20 25 56 07 10-11
info.india@axson.com
SPAIN
+34 9 32 25 16 20
spain@axson.com

ITALY
+39 02 96 70 23 36
axson@axson.it
U.K.
+44 16 38 66 00 62
sales.uk@axson.com

JAPAN
+81 5 64 26 25 91
sales.japan@axson.com

SIKA GERMANY – SikaAxson
+49 7125 940 492
tooling@de.sika.com
www.sikaaxson.de