Integra Adhesives Inc. Nov 25, 02

Engineered-Stone Bonder #101

Technical Data Sheet

Product Overview

Engineered Stone Bonder 101 is a premium grade adhesive for bonding engineered stone and natural granite.

Engineered Stone Bonder 101 is designed to produce tough, fast curing, clear or color matched seams in **Engineered Stone** and **natural Granite**. It will also provide a rigid thin line bond to many engineering polymers (Styrenics, ABS, PVC, FRP and Glass etc).

Engineered Stone Bonder 101 will provide higher performance properties than OEM adhesives in most applications, it is fully warranted and shelf stable for up to one year.[1]

The 10/1 mix ratio allows for packaging in many industry standard cartridges.

Engineered Stone Bonder 101 is available in a wide variety of colors to match most brands of Engineered Stone material and natural Granite. Custom colors are available as well as custom formulations, adjusted cure rates for automated systems, custom packaging, **private labeling** and bulk containers.

Engineered Stone Bonder 101 takes advantage of new technology to produce a hybrid polymer with the bond characteristics of Epoxies, plus the fast cure and UV stable clear appearance of Acrylics. Standard grade working time is10/15 minutes and handling strength in 20/35 minutes temperature dependent.

Physical Properties:	Adhesive	Activator
Color	Transparent or Tinted	Transparent
Specific Gravity	1.09	1.15
Mix ratio by Volume	10/1	
Mix Ratio by Weight	10/1 (9.5/1)	
Viscosity (cP,)	40/60,000	20/25,000
Working time (minutes @ 75 f.)	10-15	
Handling Strength (minutes @ 75 f.)	20/30 (temperature dependent)	

Bond Strength Examples on:	Engineered Stone	Natural Stone
Flexural Strength (ASTM D- 790)	>4000(PSI)	> 900 (PSI) Stock failure
Tensile Strength (ASTM D- 638)	>2800 (PSI)	> 500 (PSI) Stock failure
T-Peel (ASTM D-1876)	N/A	N/A
Lap Shear (ASTM D- 638)	N/A	N/A

Mechanical Properties Cured		
Impact Resistance	(ISSFA 5.60	PASS
Stain resistance	(ISSFA 5.3)	PASS
Water resistance	(ISSFA 5.8)	PASS
Heat resistance	(ISSFA 5.9)	PASS
Hardness- Barcol	(ASTM D-2583)	40/45

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Storage and handling: Methacrylate Adhesives and Activators are flammable and can be dangerous if used improperly. Avoid skin and eye contact. In case of eye contact flush with water for 15 minutes and get medical attention. Keep away from sources of ignition. Before use or handling, consult the appropriate Material Safety Data Sheet. (MSDS) information is supplied at time of initial purchase and may be requested from the manufacturer or downloaded from the web sight at- www.integra-adhesives.com
Store the adhesive in a cool area away from direct sunlight. High temperatures will reduce the shelf life of the adhesive and activator. Refrigeration is an acceptable means to increase storage life, however freezing should be prevented. Shelf life tests are based on constant temperature storage between 60 and 75 f.

Dispensing:
Integra adhesives are supplied in kit form at the appropriate mix ratio. Always maintain this ratio when mixing. Excess activator will cause higher than normal exotherm temperatures. Avoid mixing large quantities or creating thick cross sections (over ½ inch) as high temperatures may cause damage, skin burns and create the release of volatile vapors.

Working time:
The working time for the adhesive is indicated in the technical data sheet. The time is provided as an estimate of the time between mixing and set up of the adhesive. The working time is effected by the mixing ratio, air temperature, adhesive temperature, or the substrate temperature as well as the shelf life condition of the adhesive. For best results, use the adhesive at temperatures between 60 and 85 f. High temperatures increase the cure rate while lower temperatures slow the cure. Use at temperatures below 55 f. may cause incomplete cure.

Disclaimer:
The Information provided, is based on laboratory testing under controlled conditions. It is the responsibility of the end user to test the adhesive on the intended substrates under the conditions which they will be used, and to determine the suitability of the adhesive for the intended purpose.
Integra Adhesives makes no representations or warranties of any kind with respect to the data on this form or the suitability for any specific application.

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