

Ambient curing adhesive for artificial jewellery and bangle industries

Description

Lapox Banglegrip is two component modified, viscous epoxy adhesive system. When both components are mixed in recommended ratios and cured appropriately at room temperature, an excellent bond strength can be achieved with most of the substrates including glass, metals, plastics, wood and natural stones. The system is suitable for fixing gem stones and pearls in bangle industries. Banglegrip system even works at higher temperature with adequate working time.

Applications

Artificial jewellery and jewel stone fixing
Bangle industries
Souvenirs and handicrafts

Advantages

High filler loading
High strength
Long working time
Water resistance

Typical specifications

Test	Unit	Reference	Value	
			Resin	Hardener
Description	-	Visual	Clear, viscous liquid	Clear, yellowish-brown, viscous liquid
Viscosity at 25°C	m Pas	ASTM D2196	15,000 - 25,000	30,000 - 40,000
Colour	APHA	ASTM D1209	Max 100	-
Colour	GS	ASTM D1544	-	Max 8
Density	g/cc	ASTM D792	1.05 - 1.15	0.90 - 0.96

¹Viscosity by Brookfield viscometer

Mix specifications

Test	Unit	Reference	Value
Mixing ratio (resin : hardener)	w/w	-	100 : 80
Mix viscosity at 25°C	m Pas	ASTM D2196	20,000 - 30,000
Pot life ¹	Minutes	ASTM D2471	145 - 165
Peak exotherm temperature ²	°C	ASTM D2471	Max 55
Surface dry*	Hours	ASTM D5895	2.5 - 3.0
Touch dry*	Hours	ASTM D5895	8 - 9
Hard dry*	Hours	ASTM D5895	15 - 18

¹Pot life of 100 g mix mass at 25 ± 1°C in plastic disposable cup by 'Gardco' gel timer

²Total 100 g mix mass in plastic disposable cup at 25°C

*Drying time of 200 micron film on glass plate at 25°C

After cure specifications

Test	Unit	Reference	Value
Lap shear strength at 25°C ¹	kg/cm ²	ASTM D1002	Min 120

¹Lap shear strength on prepared aluminum strips after 24 hours curing

Processing	<p>Surface preparation: The adherents must be thoroughly degreased with a good degreasing solvent (e.g. toluene, acetone trichloroethylene) and abraded with coarse emery paper or chemically etched. Inadequately pre-treated substrates may not bond satisfactorily.</p> <p>Application: The mixed mass is applied by brush or spatula on the surface to be adhered. The mix must be used within its pot life.</p> <p>Curing: Curing normally takes place at room temperature within about 24 hours depending on the ambient temperature but may be accelerated by the application of heat.</p>
Packaging	Lapox Banglegrip is available in 1.8 kg HDPE bottles. Other packing may be considered on request.
Storage and handling	Lapox Banglegrip should be stored in a cool and dry place, preferably in a sealed container and should not be exposed to direct sunlight. This product has a shelf life of one year, if stored in its original container between 2°C and 40°C away from humidity and excessive heat.
Safety	Wear personal protective equipment (PPE). Avoid contact with the eyes and skin. In case of direct contact and irritation, it should be washed off immediately with soap and warm water. Avoid breathing vapours, mist or gas. Please refer to the Safety Data Sheet (SDS) of Lapox Banglegrip for detailed safety instructions.
Spills and disposal	In case of spills, sweep up and shovel the spilled material. Keep spilled material in suitable, closed containers for disposal. Soak up with an absorbent such as clay, sand or other suitable material. Flush area with water to remove trace residue. Do not allow the product to reach the sewage system. Waste must be disposed of in accordance with federal, state or local regulations, as applicable.
Contact	E-mail: support_polymers@atul.co.in Website: www.atul.co.in
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