

## Ambient cure high viscous filled adhesive system

### Description

Lapox Fillo is two component modified, thixotropic 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, reactive plastics, wood, textile and natural stones. Faster productivity can be achieved, if curing is performed at higher temperature between 40°C and 60°C. Curing at higher temperature is recommended to achieve optimum bond strength.

### Applications

Joint filling system for flooring  
Potting system for small electronics  
Wood industries

### Advantages

Good electrical insulating properties  
High bond strength  
Mechanical strength even in dynamic conditions  
Thermally stable and suitable to perform in extreme conditions  
Water and chemical resistant

### Typical specifications

Test	Unit	Reference	Value	
			Resin	Hardener
Description	-	Visual	Opaque-white, viscous liquid	Brownish, viscous liquid
Viscosity at 25°C <sup>1</sup>	m Pas	ASTM D2196	15,000 - 25,000	15,000 - 25,000
Colour	-	Visual	Opaque-white	Opaque-brown
Density	g/cc	ASTM D792	1.55 - 1.65	1.30 - 1.40

<sup>1</sup>Viscosity 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	18,000 - 23,000
Pot life <sup>1</sup>	Minutes	ASTM D2471	65 - 85
Peak exotherm temperature <sup>2</sup>	°C	ASTM D2471	Max 65
Surface dry*	Minutes	ASTM D5895	70 - 90
Touch dry*	Minutes	ASTM D5895	170 - 190
Hard dry*	Minutes	ASTM D5895	270 - 290

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

<sup>2</sup>Total 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 <sup>1</sup>	kg/cm <sup>2</sup>	ASTM D1002	Min 100
	Lap shear strength at 25°C (after 7 days curing)	kg/cm <sup>2</sup>	ASTM D1002	120 - 140
	Hardness after 24 hours <sup>2</sup>	Shore D	ASTM D2240	40 - 45
	Hardness after 24 hours	Shore D	ASTM D2240	65 - 70
	Hardness after 7 days <sup>2</sup>	Shore D	ASTM D2240	70 - 75
	Water absorption at 25°C <sup>3</sup>	%	ASTM D670 - 63	Max 0.4
	Application test at 28°C <sup>4</sup> (sanding time)	hours	-	3 - 4

<sup>1</sup>Lap shear strength on prepared aluminum strips after 24 hours curing

<sup>2</sup>Hardness checked at 25°C on 4 mm casting.

<sup>3</sup>Water absorption checked after 24 hours curing for 20 g casting

<sup>4</sup>Application test: 36 g mix mass + 3 g Wood filler; apply 4 mm thick film on wood, sanding with number 100 emery paper

## Processing

**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.

**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.

**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.

## Packaging

Lapox Fillo is available in 1.8 kg bottles, 9 kg HDPE jerry cans and 45 kg HDPE carboys. Other packing may be considered on request.

## Storage and handling

Lapox Fillo 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 Fillo 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

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## Note

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