

## Ambient cure low viscous system

### Description

Lapox Marbobond Clear is two component modified, epoxy based system suitable for treatment of Italian and other marbles. The system after curing gives an excellent gloss by polishing surface of the marble. The system is room temperature curing, low viscous and has good penetrating properties into cracks for marbles and granites. 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 performance.

### Applications

Filling and coating of Italian marbles and granites

### Advantages

Good colour stability  
 Good penetrating power into cracks  
 High gloss  
 Low shrinkage  
 System can be pigmented  
 Thermally stable and suitable to perform in extreme conditions  
 Water and chemical resistant

### Typical specifications

Test	Unit	Reference	Value	
			Resin	Hardener
Description	-	Visual	Clear, transparent liquid	Clear, transparent liquid
Viscosity at 25°C <sup>1</sup>	m Pas	ASTM D2196	1,800 - 2,400	Max 12
Colour	APHA	ASTM D1209	Max 60	Max 40
Specific gravity	-	-	1.00 - 1.20	0.90 - 0.95

<sup>1</sup>Viscosity by Brookfield viscometer

### Mix specifications

Test	Unit	Reference	Value
Mixing ratio (resin : hardener)	w/w	-	100 : 30
Mix viscosity at 25°C	m Pas	ASTM D2196	500 - 600
Pot life <sup>1</sup>	Minutes	ASTM D2471	80 - 100
Peak exotherm temperature <sup>2</sup>	°C	-	Max 60
Surface dry*	Minutes	ASTM D5895	220 - 260
Touch dry*	Minutes	ASTM D5895	360 - 400

<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 42 ± 0.5°C

### After cure specifications

Test	Unit	Reference	Value
Hardness <sup>1</sup>	Shore D	ISO/ R868	70 - 75
Water absorption (24 hours immersion)	%	ASTM D670-63	Max 0.5
Optical clarity	Visual	-	Excellent
Tg, RT curing, 24 hours <sup>2</sup>	°C	DSC	45 - 50
Tg, potential <sup>2</sup>	°C	DSC	70 - 75

<sup>1</sup>Hardness checked for 10 mm casting, after 24 hours curing

<sup>2</sup>Tg (Glass transition temperature) development behavior

## Processing

**Surface preparation:** Clean thoroughly the crack area on marbles. Ensure the surface is free from the dirt, oil, grease and moisture. Wipe off the surface of the marble with clean cloth. Inadequately pre-treated substrates may not show satisfactory results.

### Application

**Crack filling:** Take resin and hardener as per mentioned ratio, mix thoroughly. Take it in dispensing bottle, dispense the mix over cracks. Pigmentation can be done by adding suitable pigment.

**Micro | hair line crack treatment:** Take resin and hardener in above mentioned ratio, mix thoroughly and apply the mix over complete surface of marble with the help of metal spatula. Apply as many coats as required, depending upon the nature of cracks on the surface. Allow to cure in day light for 24 hours. The excess material can be grinded and removed from the surface of the substrate. Excessive humidity (above ~65%), low daylight and low temperature (less than 20°C) may retard the cure. The Lapox Marbobond Clear system will not work effectively in the monsoon season.

**Polishing of marbles and granites:** It can be done after 24 hours to 30 hours from the time of Lapox Marbobond Clear application on surface.

### Troubleshooting

Problem	Cause
Uncured after 24 hours to 48 hours	Wrong mix ratio and   or low ambient temperature
Sticky   greasy   hazy surface	High humidity

## Packaging

Lapox Marbobond Clear is available in 1.3 kg bottles, 4 kg and 12 kg HDPE jerry cans. Other packing may be considered on request.

## Storage and handling

Lapox Marbobond Clear 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 Marbobond Clear 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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