

## Ambient cure low viscous epoxy casting system

**Description** Lapox B-11 is unmodified epoxy resin based on bisphenol-A. Lapox AH-428 is clear transparent, low viscosity modified cycloaliphatic amine curing agent. When both components are mixed in recommended ratio, provides high gloss films that are resistant to various chemicals. Low mix viscosity of system permits high filler loading and exhibit outstanding mechanical and chemical resistance properties.

**Advantages**

- Excellent glossy finish
- Good chemical resistance
- Good resistance to amine blush
- Industrial flooring
- Light colour

**Applications**

- Clear coatings
- Decorative floor coatings
- Laminations and castings
- Maintenance coatings

### Typical specifications

Test	Unit	Reference	Value	
			Resin	Hardener
Description	-	Visual	Clear viscous liquid	Clear liquid
Colour	GS	ASTM D1544	Max 1	Max 1
Viscosity at 25°C <sup>1</sup>	m Pas	ASTM D2196	11,000 - 15,000	50 - 150
Epoxy value	Eq/kg	ASTM D1652	5.25 - 5.45	-
Amine value	Eq/kg	ASTM D2073	-	340 - 390
Density	g/cc	ASTM D792	1.15 - 1.17	0.97 - 0.99

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

### Mix specifications

Test	Unit	Reference	Value
Mixing ratio (resin : hardener)	By weight	-	100 : 45
Mix viscosity at 25°C	m Pas	ASTM D2196	7,000 - 9,000
Specific gravity (mix mass)	-	ISO 1183	1.09 - 1.11
Pot life at 25°C <sup>1</sup>	Minutes	ASTM D2471	30 - 40
Peak exotherm temperature <sup>2</sup>	°C	ASTM D2471	Max 160
Surface dry <sup>3</sup>	Minutes	ASTM D5895	100 - 120
Touch dry <sup>3</sup>	Minutes	ASTM D5895	300 - 320

<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 at 25± 1°C in plastic disposable cup by Temperature data logger

<sup>3</sup>Drying time of 200 micron film on glass plate at 25± 1°C

## After cure specifications

Test	Unit	Reference	Value
Hardness <sup>1</sup>	Shore D	ISO 868	Min 75
Water absorption (24 hours immersion)	%	ASTM D670-63	Max 0.5
Optical clarity	-	Visual	Excellent

<sup>1</sup>Hardness checked for 20 mm casting, after 24 hours curing

## 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 coat by brush, roller or spray. The mix must be used within its pot life. Mix mass should be poured into flat or open trays to maximize working time.

**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 B-11 and Lapox AH-428 is available in 200 kg carboy. Other packing may be considered on request.

## Storage and handling

Lapox B-11 and Lapox AH-428 should be stored in a cool and dry place, preferably in a sealed container and should not be exposed to direct sunlight. Lapox B-11 has shelf-life of at least two years and Lapox AH-428 has shelf-life of one year, if stored in its original container between 2°C and 40°C away from humidity and excessive heat. Please refer to the Safety Data Sheet (SDS) for detailed instructions on storage and handling.

## 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 SDS 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

Lapox<sup>®</sup> is a registered trademark of Atul Ltd.

# LAPOX<sup>®</sup> B-11 | AH-428

Technical Data Sheet | Polymers Business



## **Manufacturing site**

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