



CE-1 Ambient cure low viscous epoxy casting system

Advantages

- Light color
- Low viscosity
- Extended working time
- Excellent flexibility and toughness

Applications

- Clear castings
- Solvent free coatings
- Decoupage application
- Epoxy tables / furniture

Mix specifications

Test	Unit	Reference	Value
Mixing ratio (resin : hardener)	w/w	-	100 : 30
Mix viscosity at 25°C	m Pas	ASTM D2196	500 - 1000
Mix density	gm/cc	ASTM D792	1.00 - 1.12
¹ Pot life at 25°C	Hours	ASTM D2471	11 - 16
² Peak exotherm temperature	°C	ASTM D2471	Max 80

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

After cure specifications

Test	Unit	Reference	Value
¹ Hardness	Shore D	ISO/ R868	75 - 80
Water absorption (24 hours immersion)	%	ASTM D670-63	Max 0.5
Optical clarity	-	Visual	Excellent

¹Hardness checked for 20 mm casting, after 7 days room temperature curing

Processing

Mixing: Mixing is critical and must be accurate. Take resin and hardener in desired ratios. The combined liquids must be thoroughly mixed, manually or mechanically to completely remove any haziness or streaks. Scrap the sides and base of the mixing pot before transferring the mix to a desired mould for casting. It is advisable to apply the vacuum to remove air from the mix just prior to pouring into the mould. It is important to mix small quantity at a time as epoxy systems tend to give exotherm when kept in a mass.

Applications: Mix mass should then be poured into a mould. The mould can be hard or made of silicone rubber. Moulding can be carried out by gravity or under vacuum. It does not trap air easily and does not heat up when used properly. Excessive humidity (above ~65%), low daylight and low temperature (less than 20°C) may retard the curing. Cast system may not work effectively in the monsoon season. Ensure ambient material and workshop temperature is between 20°C and 35°C and humidity level below 65%. Filled mould can also be kept under vacuum to achieve air free components.

Troubleshooting

Problem

Uncured after 24 hours to 48 hours /
Sticky | greasy | hazy surface /
Air bubbles are entrapped /

Cause

Wrong mix ratio and | or low ambient temperature
High humidity
Mixing was too fast and did not have time to release air





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Storage and handling

CE-1A and CE-1B should be stored in a cool and dry place, preferably in a sealed container and should not be exposed to direct sunlight.

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 ARC-42 and AH-384 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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