

Technical Datasheet

OPTOCAST

AC-5002

EMCAST AC-5002 is a 100% solids, one component acrylic adhesive/coating/encapsulant that cures in seconds upon exposure to UV light in the 320-380 nm wavelength range. It will also cure with heat in about 10 minutes at 125°C or above for those areas that may be shadowed from UV light. This product exhibits good adhesion to a variety of polymeric substrates as well as glass and metal.

Properties Uncured

Color	Clear
Viscosity	1000 cps
Specific Gravity	1.11
Flash Point	>200°C c.o.c.
Shelf Life	6 months at 0°C or less
Pot Life	Two weeks at 25°C

Properties Cured

Color	Slightly yellow/straw colored
Hardness	90-92 Rex D
Tg	135-140°C

Cure Profile

EMCAST AC-5002 may be cured by UV, UV and heat, or heat alone.

- ◆ Minimum UV intensity is 50 mW/cm² for a flood type lamp, 600 mW/cm² for a spot cure system. Minimum UV exposure times are 2-10 seconds. The time required will depend upon the amount of adhesive used and the configuration of the part.
- ◆ Minimum heat cure temperature is 125°C. Minimum heat cure time is 5-10 minutes depending upon substrate heat up. Smaller amounts of adhesive may require longer cure times.
- ◆ These materials may need to be cured under an inert atmosphere or between two solid substrates or a tacky surface will result.
- ◆ Always wear proper eye protection when working with UV light.

Handling and Storage

Bulk packaging of EMCAST AC-5002 must be shipped and stored frozen for maximum shelf life. This includes syringes 30 cc and larger and any jars, liters, gallons, etc. Three, five and ten-cc syringes may be shipped expedited at ambient temperatures but must be stored frozen for the duration of the shelf life.

- ◆ Pot life at 25°C is 2 weeks.
- ◆ Shelf life at 0°C or less is 6 months.

IMPORTANT NOTICE

Good housekeeping rules are always important. Provide ample ventilation in all areas of handling, and use. Avoid prolonged breathing of possible fumes. Minimize skin contact. Use of goggles, rubber gloves, and protective creams is recommended. Always wash exposed areas immediately using warm water and soap followed by rinsing with clear water. If material comes in contact with eyes, flush with clear water for fifteen minutes and consult a physician immediately.

All data in this bulletin are based on our own research and the research of others. They are believed to be accurate. However, no guarantee of accuracy is made. Product description is sold without warranty except conformity to specification and on condition that the purchasers shall determine suitability for their particular purpose.

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