

Technical Datasheet

OPTOCAST

AC-3725 Series

The OPTOCAST AC-3725 family of products consists of acrylated urethane one-component liquid pre-polymers that will solidify to a tough polymer in seconds when exposed to ultraviolet light and/or heat. The product line offers a variety of processing options and performance properties. The uncured products range from low viscosity to thixotropic pastes. They exhibit excellent adhesion to a variety of substrates like metal, ceramic, glass and certain polymers. All are recommended for an extremely fast and efficient way to fasten, tack, fill, coat, encapsulate or seal precision electronic and optoelectronic components.

	<u>AC-3725B</u>	<u>AC-3725V</u>	<u>AC-3725L</u>	<u>AC-3725M</u>	<u>AC-3725T</u>
Uncured Properties					
Color	Clear	Clear	Translucent	Translucent	Translucent
Viscosity, cps @ 25°C	250	2000	8000	50,000	150,000
Specific Gravity	1.10	1.11	1.11	1.11	1.15
Pot Life @ 25°C	2 weeks	2 weeks	2 weeks	2 weeks	2 weeks
Shelf Life @ 0°C	6 months	6 months	6 months	6 months	6 months
Cured Properties					
Color	Clear	Clear	Translucent	Translucent	Translucent
Hardness	80D	80D	80D	80D	80D
Tg	55°C	55°C	55°C	55°C	55°C
Temperature Range	-40 to 150°C	-40 to 150°C	-40 to 150°C	-40 to 150°C	-40 to 150°C
Linear Shrinkage	2.8%	2.8%	2.8%	2.8%	2.8%
Liquid Refractive Index	1.475	1.475	n/a	n/a	n/a

Cure Profile

The OPTOCAST AC-3725 Series products 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.
- ◆ Minimum heat cure temperature is 125°C. Minimum heat cure time is 5 minutes depending upon substrate heat up.
- ◆ These materials must 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 OPTOCAST AC-3725 Series products 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.