

FIS LOW VISCOSITY BLUE DYE EPOXY



Part #: F1-001261

TYPICAL PROPERTIES

Number of Components	Two
Mix Ratio (Don't Exceed 5 gram mixture)	Parts By Weight
Part A (Resin)	100
Part B (Hardener)	30
Color	
Part A	Clear
Part B	Blue
Curing Schedule	
Room Temperature	Overnight
65° C	1 Hour
80° C	1/2 Hour
Pot Life	
in a viral or dish	2 hours
in a syringe	55 minutes

Viscosity (23° C/20rpm)	mixed 2,539 cPs
Specific Gravity	PART A: 1.5 PART B: .99
Glass Transition Temp (Tg)	93° C
Operating Temperature	-55 to 175° C
Hardness, Shore D	80
Degradation Temp.	356° C
Weigh Loss @ 200° C	.54%
Spectral Transmission	
% (3200-9000)	97
Shelf Life	
One year when stored at room temperature	

FIS-T-Series Blue Dye epoxy is an optically clear, low viscosity, two part epoxy developed for bonding optical glass fibers to ceramic and metal surfaces. This adhesive has multiple curing schedules which includes the ability to cure at room temperature. The Blue Dye Epoxy offer resistance to mechanical impact and thermal shock, and are also resistant to weather, water, petroleum products, salts and mild acids and alkaloids.

INSTRUCTIONS

Mixing Procedure:

- Calculate the amount of A and B needed based on the mix ratio of 10:3 by weight. Minimum batch size is 2-3 grams.
- Using a metal or glass stirrer, mix separately part A, then part B, ensuring each part is homogeneous before weighing the material to be used in the final mixture.
- To measure the correct amount of Part A and Part B, use a gram scale (preferred method).
- After taring an empty container, weigh the appropriate amount of part A (pre-determined by your desired end quantity of adhesive).
- Add the pre-determined quantity of part B to the part A. Be sure to use a clean stirrer to avoid contamination.
- Mix slowly 1-2 minute(s) clockwise in a swirling manner, followed by 1-2 minute(s) counter-clockwise, to ensure a homogenous mixture.
- Be careful NOT to vigorously mix the materials as this can introduce entrapped air/bubbles into the adhesive; potentially causing voids in the adhesive bond line.

Curing Schedule:

Room Temperature:	Overnight
65°C:	1 Hour
80°C:	½ Hour

Some ingredients in this formulation may crystallize over time especially when stored at below room temperature. This crystallization may impede the proper curing of the epoxy. Warming the pack to 125°F for a minute using a heat gun or an oven will re-dissolve the crystals back into solution. The epoxy may then be mixed, and used normally.

***See Epoxy Tech 100-126-1 for MSDS of FIS Blue Low ViscosityDye Base Material**