

## **CC3-105**

# Unfilled, Low Viscosity, General Purpose Potting Resin

CC3-105 exhibits a wide variety of excellent features found only in the highest quality epoxy resins. It is a low viscosity, unfilled, resilient, transparent epoxy which can be cured at room temperature or with heat.

#### SUGGESTED APPLICATIONS:

Epoxy Glass Lamination: excellent wetting out properties
Thin Glue-Line Bonding: no bulky filler to occupy space
Void-Free, See Through Castings: low viscosity, air released rapidly

ELECTRICAL AND PHYSICAL PROPERTIES:	H-1 Hardener	Ancamine Z	
Specific Gravity @ 25' C	1.2	1.2	
Viscosity @ 25' C, cps	300 to 500	300 to 600	
Thermal Conductivity: BTU/ft <sup>2</sup> /hr/'F/in	1.4	1.4	
Flexural Strength: psi	9,000	10,500	
Izod Impact: ft lbs/in of notch	0.5	0.5	
Water Absorption: %, 7 days @ 25' C	0.13	0.12	
Volume Resistivity @ 25' C, ohm-cm	$10^{13}$	$10^{13}$	
Dielectric Strength, volts/mil	380	390	
Bond Shear Strength: 1 in overlap	2,000	2,300	
Service Temperature, 'C continuous	-55 to +150	-70  to  +250	
Standard Color	Clear	Amber	

# **CHOICE OF HARDENERS:**

H-1 Hardener: Rigid, good dimensional stability, fast cure.

H-7 Hardener: Resilient, excellent mechanical and thermal shock, low viscosity, good

air release, fast cure.

Ancamine Z: Resilient, excellent mechanical and thermal shock, plus high heat

distortion, long pot life.

H-10LV Hardener: Variable hardness, excellent impact properties, long pot life



# CC3-105

HARDENER	PARTS BY WEIGHT PER 100 PARTS OF RESIN		POT LIFE 100 GRAM 25'C (77'F)	CURE TIME 25' C (77'F)	CURE TIME 65' C (149' F)	CURE TIME 125 ' C (257 ' F)
H-1 Hardener	14		30 mins.	6 hrs.	30 mins.	15 mins.
H-7 Hardener	29.0		45 mins.	24 hrs.	2 hrs.	30 mins.
Ancamine Z	18.0		4 hrs.	36 hrs.	16 hrs.	2 hrs.
H-10LV Hardener	rigid	33	3 hrs.	24 hrs.	3 hrs.	
H-10LV Hardener	semi-flex	83	3 hrs.	24 hrs.	3 hrs.	
H-10LV Hardener	flexible	133	3 hrs.	24 hrs.	3 hrs.	

## ROOM TEMPERATURE CURE:

H-1 Hardener: Offers a working time of 30 minutes. Cures in 6 hours at 25' C or 30 minutes at 65' C.

Produces a tough, rigid resin with good dimensional stability. Do not heat cure

if the mass exceeds 100 grams.

H-7 Hardener: Offers a working time of 45 minutes. Cures in 24 hours at 25' C or 2 hours at 65' C.

Produces a tough, resilient resin with good mechanical and thermal shock properties.

H-10LV Hardener: Offers a working time of 3 hours. Cures in 24 hours at 25' C or 3 hours at 65' C.

Produces a variable hardness resin with excellent impact properties.

#### HEAT CURE:

Ancamine Z: Offers a working time of 4 hours. Cures in 16 hours at 65' C or 2 hours at 125' C.

Produces a tough, resilient resin with good mechanical and thermal shock properties

plus a high heat distortion temperature of 125' C.

### MIXING INSTRUCTIONS:

Weigh out the desired amount of resin in a clean container. Add the hardener accurately by weight in the proper proportion as specified above. (ie. 14 grams of H-1 Hardener and 100 grams of CC3-105 for a total mix of 114 grams) Mix thoroughly. Use in a well ventilated area and avoid contact with eyes and skin.