

# 20-3302 WATER CLEAR OPTICALLY TRANSPARENT EPOXY POTTING COMPOUND & ADHESIVE

### **DESCRIPTION:**

20-3302 is a two component, *ultra clear* epoxy system. It provides excellent optical transmission along with outstanding adhesion and electrical properties. This high purity grade polymer system is formulated with proprietary ultraviolet protectors to minimize yellowing of the cured epoxy. This adhesive\potting compound, when UV aged in a QUV Weatherometer, outperforms other commercially available epoxy systems.

20-3302 is a low viscosity system designed for L.E.D. encapsulating, fiber optics, and any potting or adhesive application requiring optimum clarity. This epoxy system also provides a bubble free and glass smooth finish.

20-3302NCLV is a lower viscosity version of 20-3302. Both resins utilize the same curing agent.

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# **FEATURES:**

<ul> <li>Low viscosity</li> </ul>	<ul><li>Water clear</li></ul>
<ul> <li>Outstanding electrical properties</li> </ul>	<ul> <li>Bubble free castings</li> </ul>

### **TYPICAL SPECIFICATIONS:**

	<u>20-3302</u>	<u>20-3302NCLV</u>
Mix ratio		
by weight (Resin:Hardener)	100:50	100:50
by volume (Resin:Hardener)	100:60	100:60
Mixed viscosity @ 25°C, cps	500	250
Color	Water clear	Water clear
Pot Life, 25°C, 100 grams	30-45 minutes	30-45 minutes
Specific gravity, 25°C		
Resin	1.1	1.1
Catalyst	.96	.96
Index of refraction	1.564	1.564
Transmission at 3000 angstroms	90%	90%
Transmission at 3100 angstroms to 2.5 microns	98-99%	98-99%
Hardness, shore D	85	85
Operating temperature range, °C	-45 to +135	-45 to +135
Coefficient of Linear Thermal Expansion		
(30°C - 90°C) in/in/°C	62 x 10 <sup>-6</sup>	62 x 10 <sup>-6</sup>
Lap Shear	2,250	2,250
Dielectric strength, V/mil	500	500
Dielectric constant, 25°C	3.1	3.1
Volume resistivity (ohm-cm)	>3.5 x 10 <sup>14</sup>	>3.5 x 10 <sup>14</sup>



### **INSTRUCTIONS FOR USE:**

By weight thoroughly mix 50 parts catalyst to 100 parts resin. By volume thoroughly mix 60 parts catalyst to 100 parts 20-3302 resin.

Let cure at room temperature for 24 hours or 1-2 hours at 125°F.

## **IMPORTANT:**

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