EPOXIES
INNOVATIVE BONDING SOLUTIONS ETC.

TECHNICAL BULLETIN

20-3004 LV (Low Viscosity)
20-3004 HV (High Viscosity)
CHEMICAL RESISTANT EPOXY SYSTEM

DESCRIPTION:

20-3004LV & HV are two component chemical resistant epoxy systems. They are developed for potting, coating, and adhesive applications requiring superior chemical resistance and exhibit outstanding bonds to a variety of substrates.

20-300 LV is a low viscosity self-leveling system. 20-3004HV is a high viscosity non-sag version.

FEATURES:

- Excellent chemical resistance
- Excellent water resistance
- Excellent adhesion to metals & plastics
- DOT noncorrosive

TYPICAL PROPERTIES:

Viscosity, cps, 25 °C	
20-3004RLVBK Low Viscosity Resin	9,000
20-3004CLVBK Low Viscosity Catalyst	5,000
20-3004RHVBK High Viscosity Resin	Gel
20-3004CHVWH High Viscosity Catalyst	Gel
Color	
Resin	Black
Catalyst	White
Mixed	Grey
Gel time, 100 grams, 25 °C	90 Minutes
Hardness, Shore D	78
Mix Ratio,	
By Weight (Resin:Catalyst)	100:45
By Volume (Resin:Catalyst)	2:1
Operating Temperature Range, °C, 20-3004LV	-60 to +140
Operating Temperature Range, °C, 20-3004HV	-50 to +140
Specific Gravity, 25 °C	
20-3004LV Resin and Catalyst	1.17
20-3004HV Resin and Catalyst	1.06
Tensile Strength, psi	7,600
Tensile Elongation, %	3.2
Dielectric Constant	3.61
Dissipation Factor	0.021
Glass Transition Temperature, °C	50

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CHEMICAL RESISTANT DATA FOR 20-3004 LV & HV, % WEIGHT GAIN

	3 days	28 days
Deionized water	0.52	1.55
Methanol	7.16	9.38
Ethanol	2.41	6.92
Toluene	0.05	2.26
Xylene	0.02	0.20
Butyl Cellosolve	0.56	2.41
Methyl Ethyl Ketone (MEK)	17.17	Destroyed after 28 days
10% Lactic Acid	0.76	2.99
10% Acetic Acid	1.70	5.64
70% Sulfuric Acid	0.01	0.36
50% Sodium Hydroxide	-0.05	-0.09
10% Sodium Hypochlorite	0.49	1.16
1, 1, 1 Trichloroethane	-0.02	0.64

*Samples cured for 7 days @ 25°C before testing.

INSTRUCTIONS FOR USE:

1. By weight mix 100 parts Resin to 45 parts Catalyst. By volume mix 100 parts Resin to 50 parts Catalyst. Avoid using paper cups & wooden stirrers. Use glass or metal containers and stirrers.
2. Pour and cure according to one of the following schedules:
   - A. 25°C 24 hours
   - B. 65°C 15-20 minutes

PREPARATION OF SURFACES:

Surfaces to be bonded must be clean and grease free. Adhesion can be substantially increased by abrading the surface with emery cloth, and sandpaper. A roughened porous surface will produce the best results. Any oxidized metal films should be removed just prior to application of the adhesives.

STORAGE, HANDLING, & SAFETY:

Expected shelf life is 12 months in original unopened containers when stored at 18 – 27°C.

Please read Safety Data Sheet before using this or any other chemical.

IMPORTANT:

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