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**Resin Formulators
Technical Data Sheet**

RF 66
EPOXY CURING AGENT

Description

RF-66 is an amidoamine curing agent for use with various epoxy resins. This curing agent will cure epoxy resins at ambient temperatures or can be heat cured. A mix with RF-66 will have a very long pot life of nearly 6 hours under normal conditions. This curing agent can be used in compliance with 21 CFR 175.300 and 21 CFR 176.170 as a component of FDA-compliant epoxy systems.

Advantages

RF 66 provides the following advantages over many other types of curing agents:

- Long pot Life
- Low viscosity
- Low exotherm

Applications

- High solids coatings
- Flooring and concrete repair adhesives & mortars
- Electrical Potting & Encapsulation
- Casting & Laminates
- Adhesives

Handling Properties, Typical

Property	RF 66 CURING AGENT
Appearance	Amber Liquid
Color, Gardner	7
Viscosity @ 77°F (25 °C)	420
Specific Gravity, @ 77°F (25 °C)	0.940
Density @ 77°F (25°C)	7.9
Amine Equivalent Weight (AEW or HEW)	105
Recommended Use Level (phr, EEW = 190)	55
Shelf Life from date of shipment (DOS) @ 77°F (25°C)	12 months

Instructions for Use

Mix ratio is fixed and should be followed within 10% of the recommended use level. See "Usage" with various epoxy resins.

Surfaces should be clean and free of markings using methods and solvents suitable to the substrates being bonded. Additional surface prep may be necessary.

Property	RF 4010 & RF 3000 Epoxy Resin
Mix Ratio – Parts by Weight (*RF 4010 or RF 3000 : RF 66)	100 : 55
Appearance, mixed	Light Amber Liquid Resin
Viscosity @ 77°F (25 °C) with RF 4010	< 1500 cps
Viscosity @ 77°F (25 °C) with RF 3000	< 300 cps
Pot Life (minutes)	~ 400
Thin Film Set Time, @ 77°F (25 °C), hours	~ 25
Cure, days	5-7 days
Cure, Elevated temp. (hours, °F)	Gel at R.T + 2 hours @ 212°F (100°C)

- RF 4010 is a modified Bis A Epoxy Resin (DGEBA)
- RF 3000 is a low viscosity modified Bis A Epoxy Resin (DGEBA)

Property	RF 5407 or RF 5407AS
Mix Ratio – Parts by Weight (Epoxy : RF 66)	100 : 18
Appearance:	Off-white (bone-white)
Pot Life (minutes)	> 360
Cure	3 hours @ 150°F (66°C)
Heat Distortion Temperature °F (°C) ASTM D 648-264 psi	140°F (58°C)
Shore D Hardness	80-90
Thermal Conductivity (BTU/hr)(sq.ft.)(°F)(ft.) (cal/sec)(sq.cm)(°C)(cm)	20 .01

RF 5407 or RF 5407AS are ceramic filled Bisphenol-A epoxy resins which offers very high thermal conductivity for electrical potting applications.

Cure Schedule

Cure time depends on the temperature of the curing material. At room temperature (75°F), a tack free thermoset is achieved in about twelve hours. Full strength requires 5-7 days at R.T. For most manufacturing procedures, the parts can be handled and even worked after twenty four hours at 75°F. Much faster cures can be achieved with the application of heat. At 150°F, full cure is achieved in as little as 2-3 hours.

SAFETY INFORMATION: See Materials Safety Data Sheet for RF 66 for proper storage and handling.

Notice to Buyer: Exclusion of Warranties and Limitation of Liability

All information supplied by Resin Formulators and E.V. Roberts is considered accurate, but is furnished upon the express condition that the person receiving it shall make their own tests to determine its suitability for their particular purpose

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