Technical Data Sheet

Versamid® 125

Product Description **Versamid® 125 is a medium viscosity, reactive polyamide resin designed for use with solid or liquid epoxy resins for tough, chemical-resistant thermoset coating applications that cure at room temperature.**

Key Features & Benefits ***- Excellent resistance properties and adhesion***

Chemical Composition **Polyamide resin based on dimerized fatty acid and polyamines**

Properties

Product Specifications

Amine value	330 – 360 mg KOH/g
Viscosity at 75°C (Brookfield)	650 – 950 cps
Gardner color	8 max

Typical Characteristics

Amine hydrogen equivalent weight (theoretical)	103
Density	8.1lbs/gal
Flash point (Seta)	> 200°F

These typical values should not be interpreted as specifications.

Applications

Versamid® 125 is a medium viscosity, reactive polyamide resin designed for use with solid or liquid epoxy resins for tough, chemical-resistant thermoset coating applications that cure at room temperature. This resin is also useful in adhesive applications.

Versamid® 125 and epoxy resin systems are generally harder than and cure more rapidly than Versamid® 140 systems. It is often blended with Versamid® G 250 US, a fatty amido amine resin, to provide a range of viscosities, cure speeds and resistance properties.

Versamid® 125 and epoxy resin systems are recommended for applications such as:

- Maintenance coating applications
- Primers
- Enamel paint formulations

Processing

Mix ratio with 190 EEW liquid epoxy is 54 phr. Due to chemical reaction, Versamid® 125 and epoxy resins should not be mixed until just prior to use.

Typical Properties of a Versamid® 125 Cured Coating

Tack-free time	5 hours
Through-cure time	12 hours
Pot life	2 hours
Gel time	129 minutes

Cured with 190 EEW liquid epoxy resin.

Typical Cured Resin Properties

Tg	84°C
Tensile strength	6,100 psi
Elongation	5%
Flexural modulus	239,000 psi
Compressive strength	8,500 psi

Cured with 190 EEW liquid epoxy resin for 7 days at 25°C.

Typical Chemical Resistance Properties of Unfilled Castings

Chemical	**Weight Gain (%)**
10% Acetic acid	6.93
10% Hydrochloric acid	0.80
10% Sulfuric acid	1.24
10% Sodium hydroxide	0.57
Methyl ethyl ketone	Destruct
Xylene	15.47
Ethanol	6.71

Percent weight gain after a 7-day cure at 25°C followed by a 21-day immersion at 25°C.

Formulations

General Purpose, White Gloss Enamel Formula, Room Temperature Cure

Part A	**Pounds**	**Gallons**
Mix the following materials:		
Epoxy resin solution	360.0	40.0
Xylene	36.0	5.0
Propylene glycol methyl ether acetate	40.2	5.0
Mix the following materials separate from Part A:		
Part B		
Versamid® 125 (mix prior to use)	121.5	15.0
Calcium carbonate	150.0	6.6
TiO_2	175.0	4.9
Bentonite clay agent	8.0	0.5
Xylene	108.0	15.0
Propylene glycol methyl ether	62.0	8.0
Total	1,060.7	100.0

Note: Allow ½ – 1hr induction time before application. Reduce viscosity as needed for application after induction time using the following solvent blends.

	Applications	
Thinners	**Brush (%)**	**Spray (%)**
MIBK	33	45
Xylene	33	--
Toluene	--	50
Propylene glycol methyl ether	34	3
Dipropylene glycol methyl ether	--	2
Total	100	100

Formulation attributes

Viscosity, combined (Krebs)	71 KU
Weight per gallon, combined	10.6lbs/gal
Pigment:Binder ratio	1:1.2
PVC	21.8%
Solids	68.2%
Tack free (typical)	4 – 6 hours
Hard dry (typical)	Overnight
Full resistance properties (typical)	7 days

Safety

General

The usual safety precautions when handling chemicals must be observed. These include the measures described in Federal, State, and Local health and safety regulations, thorough ventilation of the workplace, good skin care, and wearing of protective goggles.

Safety Data Sheet

All safety information is provided in the Safety Data Sheet for Versamid® 125.

Storage

Versamid® 125 may absorb moisture and carbon dioxide if left in open containers, which may result in an increased viscosity and some foaming when curing epoxy resins. Therefore, it should be kept in tightly closed containers when not in use and stored in a cool, dry place. Properly stored and protected, an unopened container of Versamid® 125 should have a shelf life of two years.

Important

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*Versamid® G 250 US was previously BASF Genamid® 250 US

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