

functional products

VERSAMID® 140

Use

VERSAMID 140 is a medium low viscosity, reactive polyamide resin based on dimerized fatty acid and polyamines. This product is designed for use with solid or liquid epoxy resins to give tough, chemical resistant thermoset coatings with room temperature cure.

VERSAMID 140 coatings are more chemical and solvent resistant than VERSAMID 115 systems and generally lower in viscosity than VERSAMID 125 formulations.

This resin offers a unique combination of hardness and flexibility along with the highest chemical and solvent resistance of the dimer based polyamide resin series.

VERSAMID 140/epoxy resin systems are used in maintenance coatings, primers and high solids enamel paint formulations.

VERSAMID 140 is very useful in adhesive formulations.

Specification

Brookfield viscosity at 75 °C (ASTM D 3236)	300 - 600 mPa·s
Gardner colour (ASTM D 1544)	11 max
Appearance (ASTM D 2090)	Liquid amber
Amine value - mg KOH/g (ASTM D 2073)	370 - 410

Additional data

Active content	100 %
Gardner colour	6
Specific gravity at 25 °C	0.97 g/cm ³
Flash point (ASTM D 92/72)	185 °C
Theoretical H-equivalent *	97

* Please use theoretical H-equivalent as indicative information in so far as the average H-equivalent could be significantly different due to the polymer development (molecular weight distribution) and the purity of commercial amines.

Mixing ratio suggestions are more reliable being based on experimental tests.

Properties

APPLICATION CHARACTERISTICS

Mixing ratio/190 EEW liquid epoxy 50 - 70 phr
Pot-life at 25 °C on 200 g mass
with EEW 190 liquid epoxy 2 hours
Max exotherm peak 150 °C
Tack-free time at 25 °C
(200 µm wet) with EEW 190
liquid epoxy 6 hours

Mixing ratio /475 EEW solid epoxy 20 - 30 phr
Pot-life at 25 °C on 200 g
mass with EEW 475 solid
epoxy 40 % T.N.V. 1 - 2 days
Tack free time at 25 °C
(100 µm wet) with EEW 475
solid epoxy 40 % T.N.V. 2 hours

Minimum application temperature 15 °C

CHEMICAL RESISTANCE

All systems based on VERSAMID 140 show good resistance against aliphatic hydrocarbons, lubricants, alkaline solutions and diluted acids; good-fair resistance against atmospheric agents and water.

All analytical methods are available on request.

Approvals

FDA

CFR 21 § 175.105, 175.300 (b)(3)(viii)

Regulatory Status

TSCA (USA), DSL (Canada), PICCS (Philippines), AICS (Australia), ECL (Korea), ENCS/MITI (Japan), IECSC (China), EINECS (EU)

Miscellaneous

HANDLING AND STORAGE

This resin may absorb moisture and carbon dioxide if left in open containers.

This 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 protected from moisture, the product has a minimum shelf life of one year.

This product and epoxy resins should not be mixed until just prior to use because a chemical reaction will take place.

Read SAFETY INFORMATION before handling or using product.

Revision-No.

6-03.2008 Effective March 12, 2008

Subject to appropriate storage under the usual storage and temperature conditions, our products are durable for at least 2 years.

Suggestions of processing and using our products are given with best knowledge and information but without obligation. COGNIS does not accept any guarantee to the suitability of a product for the user's specific purpose. Furtheron the user himself assumes a liability to follow all legal regulations by using our products. The user can only pass on our sample to third parties with previous assent of COGNIS.



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