

PRODUCT DESCRIPTION

SETAMINE US-132 BB-68 resin is the same resin to SETAMINE US-132 BB-71, but NV and viscosity are lower type by adding more n-butanol. SETAMINE US-132 BB-68 is a highly reactive, n-butylated high imino melamine crosslinker supplied in n-butanol. Like other high imino melamine resins, SETAMINE US-132 BB-68 has a high tendency to self-condense resulting in films with high film hardness that can be adjusted based on loading. Intended for use in automotive OEM top coats and general industrial systems for stoving at low temperature (80 - 100°C) and/or short time. In combination with air drying alkyd resins for use in forced drying enamels (80°C) like car repair finishes.

BENEFITS

- Fast cure response
- Substrate wetting
- High gloss

APPLICATION AREAS

- Automotive top coats
- General industrial coatings

PHYSICAL PROPERTIES

Appearance	Clear & Clean	ASTM E284
Non-volatile ¹ by wt.	68.0 ± 1.5%	DIN EN ISO 3251
Viscosity, 23°C at 50 s ⁻¹	2000 - 6000 mPa.s	DIN EN ISO 3219
Color, APHA	≤ 50	DIN EN ISO 6271
Mineral Spirit Tolerance (20°C)	175 - 375%	ASTM D1198
Acid Value (as supplied)	≤ 1.4 mg KOH/g	DIN EN ISO 3682
	¹ 60 minutes at 125°C, 1 gram resin/2 mls xylene	

TYPICAL PROPERTIES (NOT CONTINUALLY DETERMINED)

Density	1.03 - 1.04 g/cm ³	ASTM D1475-13
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SOLUBILITY

Alcohols	Complete
Esters	Complete
Ketones	Complete
Aromatic hydrocarbons	Complete
Aliphatic hydrocarbons	Partial
Water	Insoluble

COMPATIBILITY

Acrylic resins	Very good
Alkyd resins	Very good
Polyester resins	Very good
Epoxy resins	Very good

BACKBONE POLYMER SELECTION

SETAMINE US-132 BB-68 resin is an effective crosslinker for backbone polymer resins containing hydroxyl, carboxyl, and amide functional groups, such as those found on alkyd, polyester or acrylic resins. Although the optimum level of SETAMINE US-132 BB-68 resin should be determined experimentally, ratios of 25 to 35% based on resin solids are typically most effective.

CATALYSIS

SETAMINE US-132 BB-68 resin may not require the addition of an acid catalyst to the formulation to obtain effective cure. In many instances, the acidity of the backbone polymer in the formulation is sufficient to catalyze the reaction under normal baking conditions (15 - 20 minutes at 130 - 150°C). At lower bake temperatures, a catalyst, such as CYCAT® 296-9 is recommended at a concentration of 0.5 - 1.0% on total resin solids.

FORMULATION STABILITY

The stability of solvent-borne systems containing SETAMINE US-132 BB-68 resin can be enhanced by the addition of primary alcohols, tertiary amines, or a combination of these. Low molecular weight primary alcohols such as ethanol or n-butanol are most effective. Recommended amines are triethylamine (TEA) or dimethylethanolamine (DMEA) at a concentration of 0.5 - 1.0% on total binder solids.

STORAGE STABILITY

SETAMINE US-132 BB-68 resin has a shelf life of 720 days from the date of manufacture when stored at temperatures below 32°C. Although low temperatures are not detrimental to stability, its viscosity will increase, possibly making the resin difficult to pump or pour. The viscosity will reduce again on warming, but care should be taken to avoid excessive local heat as this can cause an irreversible increase in viscosity. The expiration date may be extended and COA updated after QC testing of retained samples, only for material in allnex possession.