

Application

RESIMENE® 720 LF is a methylated, high imino melamine formaldehyde crosslinker with very high reactivity and low free formaldehyde content. It is supplied as 76% solids, clear and colourless solution in n-butanol.

RESIMENE® 720 LF is particularly utilized in water- and solvent-borne coil and container coatings, automotive primers and topcoats, as well as in drum and mirror baking enamels.

Properties	Typical values	Standard
Non-volatile content, foil method, 45 min 45 °C [%]	74.0 – 78.0	Internal method
Non-volatile content, 2g 1h 120 °C [%]	68.0 – 72.0	DIN EN ISO 3251
Viscosity, 23 °C [mPas]	1000 – 2500	DIN EN ISO 3219-B
Colour (APHA)	≤ 30	DIN EN ISO 6271
Haze (APHA)	≤ 5	DIN EN ISO 7027
Free formaldehyde content [%]	< 0.5	DIN EN ISO 11402 4.3

Processing

RESIMENE® 720 LF is soluble in alcohols, esters, ketones and water. In combination with suitable acrylic, alkyd, epoxy and polyester resins RESIMENE® 720 LF can be used to formulate solvent- and water-borne baking enamels that can be cured at > 110°C.

Optimum film properties can typically be achieved with binder/crosslinker ratios in the range of 65/35 to 75/25, based on solids. The best ratio depends on the nature of the binder resin, the curing conditions and the required coating properties and therefore should be determined experimentally. Due to the high reactivity of RESIMENE® 720 LF, usage of a catalyst is normally not required. If acid groups are present in the main binder resin, the crosslinking reaction is accelerated.

To achieve optimum formulation stability in water-borne systems, the addition of tertiary amines at a concentration of 0.5 – 1.0% on total binder solids, and a pH value of the formulation in the range of 8.0 – 8.5 are recommended.

Storage

Liquid resins age when stored. As a result of aging, product properties may change over time. The speed of these changes depends on storage conditions.

RESIMENE® 720 LF can be stored for at least 12 months from the date of production at 15 - 25 °C in originally closed containers. If exposed to higher temperatures, resin properties may change even before reaching the storage life indicated above. At freezing temperatures, the resin becomes highly viscous, but may be fully reused after warming up to room temperature. Exposure to direct sunlight should be avoided.

The storage life indicated above is a guideline based on our experience. Users of this resin should conduct individual tests in order to fully understand possible changes to the product performance due to aging.

Handling and safety requirements

Detailed information is available in the safety data sheet for the product.

Common indications

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