Technical Data Sheet

Basonol® HPE 1170 B

We create chemistry

Product description

Basonol® HPE 1170 B is a OH functional hyperbranched Polyester to be used as a cobinder in 2K PUR and 1K clear- and pigmented coating systems for improved performance.

Key benefits

- Low impact on VOC, especially in High Solid coatings (± 2 % max)
- Prolonged pot life
- Improved drying speed (physically / chemically)
- Earlier block resistance
- Improved early hardness
- Improved final hardness
- Improved reflow behavior especially in clear coats
- Improved chemical resistance
- Excellent weathering performance
- Low hydrolysis sensitivity

1K stoving system:

- Improved final hardness
- Improved chemical resistance
- Low hydrolysis sensitivity
- Excellent weathering performance

Chemical nature

Hyperbranched polyester

Properties

Physical form

Clear liquid resin

Technical data

(no supply specification)

Solids content by mass at 150 °C	BASF Methode	~ 70 %
Viscosity at 23 °C, D = 1000 s-1	DIN EN ISO 3219/A3	~ 4400 mPa.s
Glass transition temperature (Tg) 10 °C/min	ASTM D3418-03	~ 18 °C
Hydroxyl value (solid resin)	DIN 53240, 2007-11	~ 280 mgKOH/g
Acid number (solid resin)	ISO 2114	~ 85 mgKOH/g

Application

Main focus on high solid 2 K PU systems to improve curing and application properties at low VOC

- High solid refinish clear coat
- OEM clear coat
- High solid and super high solid pigmented topcoat and DTM systems
- e.g. ACE, Transportation

Formulation Guidelines

- Use HPE as co-binder (5 - 30 %) on total polyol solid
- Preferred use, e.g. in combination with polyacrylates, but also with polyesters, alkyds and others
- Compatibility should be checked before further testing

solubility

- ● good solubility
- ◎ limited solubility
- ○ poor solubility

[1] registered trademark of Exxon Mobil Corporation

Storage

This product shall be stored in its tightly sealed original packaging at temperatures below 30 °C.

Safety

When handling this product, please comply with the advice and information given in the safety data sheet and observe protective and workplace hygiene measures adequate for handling chemicals.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product.
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