

Basonol[®] HPE 1170 B

General

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

Key features & benefits

low impact on VOC, especially in High Solid coatings ($\pm 2\%$ max)
prolonged pot life
improved drying speed (physically / chemically)
earlier block resistance
improved early hardness
improved final hardness
improved reflow behavior especially in clearcoats
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

Appearance

clear liquid

Typical characteristics

(should not be interpreted as specifications)

solid content by mass (150°C)	(70 \pm 2) %
viscosity at 23°C(73°F) (shear rate 1000s ⁻¹)	(4.4 \pm 1.4) Pa.s
glass transition temperature Tg (10°C/min)	18°C (64°F)
hydroxyl value (solid resin)	(280 \pm 10) mg
acid number	85 mg KOH/g

Application

Mainly focus on high solid 2K 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

Solvent	Solubility
butanol	Good
Butyl acetat	Good
Methylethyl-keton	Good
White spirit	Poor
Solvesso®1 100	Limited
xylene	Limited
water	Poor

Storage

This product has a shelf life of one year if it is stored in its tightly sealed original packaging at temperatures below 30°C (86°F).

For further detailed application information please contact our Technical Support Department.

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. The agreed contractual quality of the product results exclusively from the statements made in the product specification. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.

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BASF East Asia Regional Headquarters Ltd.

45th Floor, Jardine House, No. 1 Connaught Place, Central, Hong Kong

BASF Advance Chemical Co., Ltd.

No. 333 Jiang Xin Sha Rd, Pudong, Shanghai, China