

Thickening & levelling agent for Water-based systems  
HEUR Polyurethane Thickener

## Typical Characteristics

|                              |   |
|------------------------------|---|
| Nature                       | <b>Water soluble non ionic polyurethane</b> |
| Appearance                   | <b>Whitish liquid</b>                       |
| Solid Content (%)            | <b>40</b>                                   |
| Active Content (%)           | <b>40</b>                                   |
| pH                           | <b>5,5 (@10% in water, 25°C)</b>            |
| Brookfield viscosity (mPa.s) | <b>2000</b>                                 |
| Specific gravity             | <b>1.06</b>                                 |
| Solvent                      | <b>Water / Butyldiglycol (45/15)</b>        |

## Description

BR 125 NPF is a polyurethane associative rheology modifier which gives formulations a unique Newtonian rheological profile characterised by a low viscosity at low shear rate and a high viscosity at high shear rate. The main applications for BR 125 NPF are gloss emulsion paints, semi-gloss, flat dispersion paints. Formulation of anticorrosive paints or adhesives can also be based on BR 125 NPF.

## Recommended addition level

0,2 - 1.0 % as supplied on total formulation.

## Standard Packaging

*Other packaging may be available upon request*

- 1000L IBC
- 220L Plastic Drum

## Handling & Storage

It should be protected from the effects of weathering; stored between 5 and 40°C and sheltered from direct sun exposure. This product can be altered by frost. Once opened, packaging should be resealed immediately after use. In these conditions, this product should be used within 12 months from delivery.

## Processing instructions

BR 125 NPF may be used as supplied or as a 10% solids solution prepared by slowly adding 20 parts of BR 125 NPF to 80 parts of water under good stirring (the reverse procedure leads to a highly viscous phase and should be avoided). The maximum thickening of paint is obtained 24 hours after. It is used at 0.1 to 1% active ingredients on the total weight of the paint formulation. BR 125 NPF can be added either at the pigment grind stage or after letdown. Part may be held out for final viscosity adjustment. Care must be taken to achieve perfect dispersion of BR 125 NPF in the medium. The thickening efficiency of BR 125 NPF will depend on the nature and the particle size of the emulsion binder, and on the choice of coalescing agents. NB: The quantity of butyldiglycol present in BR 125 NPF can be deducted from the amount of coalescent solvent used in the paint formulation.

## Health and environmental data

For safe handling please refer to the Safety Data Sheet. For more information about health and environmental data, please contact us.

## Adhesives & Sealants

- Assembly
- Other Adhesives
- Pressure Sensitive Adhesives

## Coatings & Inks

- Architectural Coating
- Graphic Arts
- Industrial Coating
- Textile & Leather Coating

## Key Benefits

### Formulation

- Easy handling
- Post addition
- Ready to use

### Storage

- Viscosity stability
- In-can appearance
- Syneresis resistance

### Application

- Brushability
- Rollability
- Spatter resistance

### Film Properties

- Gloss
- Levelling
- Transparency

|                             |     |
|-----------------------------|-----|
| <b>APEO free:</b>           | Yes |
| <b>Bacteria resistance:</b> | Yes |
| <b>Heavy metal free:</b>    | Yes |

## Thickening mechanism

|                  |        |
|------------------|--------|
| Non Associative  | ●●●○○○ |
| Self Association | ●●○○○○ |
| Associative      | ●●●●●● |

## Viscosity contribution

|                         |        |
|-------------------------|--------|
| Low Shear contribution  | ●●●○○○ |
| Mid Shear contribution  | ●●●○○○ |
| High Shear contribution | ●●●●○○ |

## PVC

|          |        |
|----------|--------|
| PVC Low  | ●●●●○○ |
| PVC Mid  | ●●●●○○ |
| PVC High | ●●●○○○ |