# Bermocoll® Prime

Serving the paint industry throughout the world





# Bermocoll® makes a difference with reliable rheology



We at AkzoNobel have been serving the paint industry around the world for more than 50 years with our brand Bermocoll®, a range of non-ionic cellulose ethers. Bermocoll is used as a rheology additive, stabilizer and water-retaining agent for water-based decorative paints. Bermocoll is manufactured through a unique, solvent free process, offering industries the lowest carbon footprint.

Bermocoll is available in a wide range of viscosities, and a variety of modified grades. Cellulose is a natural polymer and the main component is wood pulp or cotton linters. When we manufacture Bermocoll, the cellulose reacts with a combination of different substituents such as methyl, ethyl, hydroxyethyl and hydrophobic groups. This process, called etherification, makes Bermocoll water soluble.

# Bermocoll<sup>®</sup> Prime performance advantages

- Superior color stability and excellent color development
- Efficient thickening and good stability at low addition rate
- Optimal rheology profile

#### Flat paint formulation

#### **Binder**

Styrene acrylic system known to be sensitive with respect to color acceptance.

#### **Tinters**

Tinters of different color shades that are known to be problematic.

#### **Dispersants**

Range of products tested.

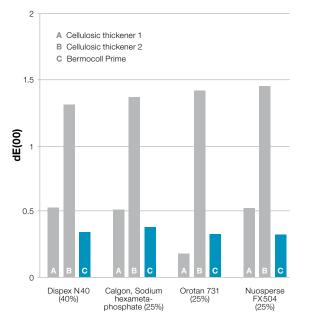
Flat Paint PVC 58

Bermocoll Prime has been developed as next generation of cellulose ethers. It can be used in all types of latex paints ranging from low to high PVC. This new product is suitable for all types of interior and exterior paints and the advantages are most apparent in flat to semi-gloss finishes.

# Superior color stability and excellent color development

Excellent color stability is achieved with Bermocoll Prime within a wide range of colorants and latex binders. Bermocoll Prime is designed with particular attention to color acceptance and color development and offers reliable color performance. This means that the color appears in a uniform homogenous manner and at the expected color strength. Color acceptance is related to the compatibility, distribution and stability of the colorant in the base paint.

## Color acceptance, violet 3% – typical dispersing agents



## Superior color stability and excellent color development

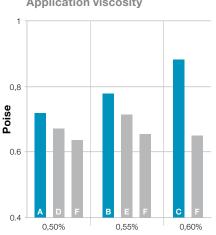




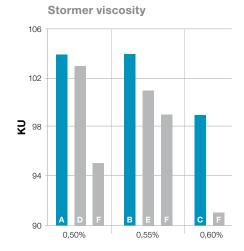
Bermocoll Prime achieves higher Stormer and ICI viscosity than standard HEC and Bermocoll EBS when using equal dosage. Paints formulated with Bermocoll Prime show very stable and constant viscosity even when stored at elevated temperatures and are very versatile with respect to compatibility with different kinds of binders.

Flat paint formulation from Europe, Asia and North America





C Bermocoll Prime 1000

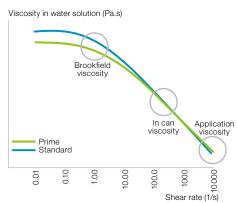


#### Optimal rheology profile A Bermocoll Prime 3500 D Bermocoll EBS 481 FQ B Bermocoll Prime 2500 E Bermocoll EBS 451 FQ

F HEC, comparable grade

Bermocoll Prime is less shear thinning than Bermocoll EBS. With a comparable viscosity in paint Bermocoll Prime has lower Brookfield viscosity in water solution.

#### Optimal rheology profile



#### Viscosity 1% water solution

Bermocoll Prime 3500	3000-4000
Bermocoll Prime 2500	2200-3200
Bermocoll Prime 1000	500-900

Viscosity cP\*

#### **Typical properties Bermocoll Prime**

Appearance	white powder
Particle size	98% < 500 μm
Water content	max 4%
Salt content	max 6%

<sup>\* 1%</sup> water solution Brookfield LV 12 rpm 20°C

# **About us**

Performance Additives is one of the businesses within the global company AkzoNobel. We have a unique technology base and experience of cellulose derivatives, with more than 50 years of development, manufacturing and sales of these products. Today, we serve our customers in more than 80 countries.

### A dedicated unit with multinational resources

The combination of a multinational group's large resources and a dedicated unit's focus on its customers gives us a unique position. Our research and product development has always been guided by our customers and their requirements. We strive to be the mostreliable and dedicated supplier of cellulose ethers to the water borne paint industry.

#### Looking closer, seeing further

At AkzoNobel, we believe the future belongs to those smart enough to challenge it. We believe that real progress belongs to those who not only think with courage, but also have the courage to deliver on the thought. What drives us is knowing that what is good for our customers today is not necessarily good enough for them tomorrow. What excites us is asking the unasked question. What inspires us is seeing the opportunity others cannot. What unites us is the intelligence to deliver where others have not.

This benefits our customers because we sustain their future competitiveness and meet the consumers' unspoken needs.

### Innovation & Sustainability More value from fewer resources

At AkzoNobel innovation starts with understanding what our customers need. Our commitment is to do that better and quicker than our competitors. That means understanding and anticipating how our world and our customers' lives and expectations are changing.

Of course sustainability is integral to everything we do at AkzoNobel. Nowhere is that more obvious than in our innovations. The world needs sustainable solutions. That is why most of our innovation work is driven by sustainability and the ultimate goal is to deliver more value, with fewer resources.









#### www.akzonobel.com/pa

AkzoNobel is a leading global paints and coatings company and a major producer of specialty chemicals. Calling on centuries of expertise, we supply industries and consumers worldwide with innovative products and sustainable technologies designed to meet the growing demands of our fast-changing planet. Headquartered in Amsterdam, the Netherlands, we have approximately 47,000 people in around 80 countries, while our portfolio includes well-known brands such as Dulux, Sikkens, International, Interpon and Eka. Consistently ranked as one of the leaders in the area of sustainability, we are committed to making life more liveable and our cities more human.

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