



# Newsletter HomeCare 3/2021

Rheozan® BLC Liquid Cellulose – 100% Natural Suspension Agent

June 2021

## HomeCare

Rheozan® BLC is a new natural, 100% biodegradable rheological agent that offers new possibilities to suspend objects in detergent formulations without impacting perceived viscosity.

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## Rheozan® BLC biodegradable natural rheology agent

Rheozan® BLC is a ready to use nature-based solution which targets low viscosity liquid formulations and enables high yield stress in home & personal care applications. When added in surfactant containing formula, the solution creates a three-dimension network of insoluble fibers of cellulose that provides yield and suspension properties of various particulate matters without affecting final or perceived viscosity of the formulation.

- **Typical usage level 2-7,5%**
- **No incompatibility to any surfactants, it is compatible with cationic polymers**
- **Liquid**
- **2<pH<12**
- **Salt & enzyme tolerant**

### Identification

- **INCI:** Water, Cellulose, Glycerin, Xanthan Gum, Cellulose Gum, Sodium Benzoate
- **CAS Number:** 9004-34-6

## Rheozan® BLC innovating with the full power of biotechnology

### Great sustainability credentials

#### Benefits for FORMULATORS

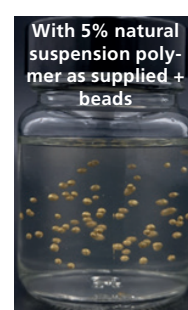
- Eco-friendly alternative solution, no concern by the microplastics topic
- Flexible ingredient: high suspension power in keeping fluidity of the formula
- No impact on the flash foam
- A sustainable production process in line with the Green Chemistry Principle, a microbial fermentation
- Easy to process & in a liquid form

#### Benefits for CONSUMERS

- Naturally-derived ingredient & comes from renewable raw materials
- Derived from a green process
- Readily biodegradable

### Great performance profile

- Can successfully replace harmful synthetic ingredients
- Forms a 3D nanofibers network in concentrated surfactant formula
- Flexible ingredient for versatile activities (easy to suspend beads, actives and others in different chassis)
- Easy to incorporate liquid compatible with high/low pH & enzymes
- Widely compatible with a large range of surfactants and tolerant to temperatures, salts
- Brings high suspension power at low active loading (~500 ppm) without impacting formulation viscosity – unlike thickeners



**Rheozan® BLC forms a 3D reticulated network of micro-fibers of cellulose in liquid formulations to give yield and suspension properties**

## Rheozan® BLC adds suspension to low viscosity formula

### Typical home care applications:

#### Suspending fragrance capsules or cellulose beads

Suspending fragrance capsules at high concentration in liquid laundry detergent are challenging due to capsules precipitation or creaming. Liquid laundry detergent manufacturers often cannot dose beyond 0,1% w/w fragrance capsules. Rheozan® BLC provides enough yield to suspend 0,3% w/w (or higher) capsules with 2,5% loading.

#### Suspending abrasive particles

Rheozan® BLC is compatible with acidic toilet bowl cleaner (e.g. based on citric acid) and provides enough yield to suspend abrasive particles such as feldspar at 1% loading. Rheozan® BLC is compatible with Rheomer® FC NAT, Solvay's natural thickening polymer.

#### Suspending zinc pyrithione

Rheozan® BLC enables and stably suspend zinc pyrithione (ZPT) in the laundry sanitizer formulation. ZPT will bring additional antifungal benefit to the formulation.

#### Natural opacifier in liquid hand dishwash

Widely used styrene acrylate opacifier for liquid formulas would be considered as micro-plastic and would be banned in 2025. Biobased and biodegradable natural opacifier particles (e.g. Mackadet® OPR2) is currently introduced to replace the synthetic styrene acrylate. Rheozan® BLC provides enough yield to suspend opacifier particles at low viscosity with 2,5% loading.

#### Peroxide gel

Rheozan® BLC is compatible with acidic peroxide gel and provides enough yield to suspend particles at 5% loading. Offers possibility to suspend particle and encapsulated actives.

## SUMMARY: Rheozan® BLC Liquid Cellulose

- **Function:** Suspension aid
- **Benefits:** Improves compatibility, easily soluble, stable across a wide range of PH, doesn't impact perceived viscosity
- **Applications:** Laundry detergents, hand wash, dish wash, cleaners, body wash, hand soap, shampoo
- **Green credentials:** RCI <90, 100% natural, alternative to synthetic

### Imprint

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