

## Starting point formulation – Hypochlorous acid gel – HOCl comfort gel

A gentle hypochlorous acid formula that adapts to your routine – used as a refreshing mist or a calming gel for sensitive skin – formulated with **PURABYK-R 5501** to create a soft gel structure that prevents the sprayed gel from running off the skin. It helps reduce visible redness, relieves dry and itchy skin, calms scalp discomfort, and provides soothing refreshment after sun exposure. It supports a clearer-looking complexion – alcohol-free and gentle enough for daily use.

### Formulation

Position	Component	INCI	Supplier	Function	Dosage (%)
A	Hypochlorous Acid Solution	Aqua, Hypochlorous Acid (0,03%)	Various	Carrier/active	96.00
	PURABYK-R 5501	Sodium Magnesium Fluorosilicate (Nano)	BYK	Rheology modifier	3.50
B	Ortho-phosphoric acid (21 % PA)	Phosphoric Acid (21 % PA)	Various	pH adjuster	0.50
<b>Total</b>					<b>100.00</b>

**Note:** When handling HOCl, contact with metal including stainless steel needs to be avoided, for stirring non-metal (PTFE or glas) stirrer are recommended.

#### Instructions (manufacturing procedure)

- Add PURABYK-R 5501 to the hypochlorous acid solution while mixing at high agitation (create a vortex) and continue stirring until a homogeneous, lump-free gel is obtained.
- Adjust the pH-value to 5.0 using phosphoric acid.
- Fill into spray bottles or gel dispenser.

#### Characteristic data

- Appearance: nearly transparent, viscous gel.
- Storage stability: 3 months at 40 °C.

**PURABYK-R 5501** is a rheology additive based on synthetic phyllosilicate for aqueous systems to provide thixotropic stabilization in personal care applications.



Your local  
contact

**BYK-Chemie GmbH**  
Abelstraße 45  
46483 Wesel  
Germany  
Tel +49 281 670-0

[info@byk.com](mailto:info@byk.com)  
[www.byk.com](http://www.byk.com)

ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK-AQUAGEL®, BYK-DYNWET®, BYK-MAX®, BYK-SILCLEAN®, BYKANOL®, BYKCARE®, BYKETOL®, BYKIET®, BYKONITE®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFAK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, NANOBYPK®, OPTIBENT®, OPTIGEL®, PURABYPK®, RECYCLOBYPK®, RHEOBYPK®, SCONA®, SILBYPK®, TIXOGEL® and VISCOBYPK® are registered trademarks of the BYK group.

The information contained herein is based on our current knowledge and experience. No warranties, guarantees and/or assurances of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. Any information about suitability, use or application of the products is non-binding and does not constitute a commitment regarding the products' properties, use or application. Contractual terms and conditions, in particular agreed product specifications, always take precedence. We recommend that you test our products in preliminary trials to determine their suitability for your intended purpose prior to use. We reserve the right to make any changes and to update the information herein without notice.

