

PURABYK-R 5500

Rheology additive based on synthetic phyllosilicate for aqueous systems to form shear-thinning thixotropic hydrogels from solutions of hypochlorous acid (HClO).

Product data

Composition

Modified synthetic phyllosilicate

Typical properties

The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Bulk density: 1000 kg/m³
 pH value (2 % in H₂O): 10
 Moisture content: max. 10 %
 Appearance: free-flowing, white powder

Storage and transportation

PURABYK-R 5500 is hygroscopic and should be transported and stored dry in the unopened original container at temperatures between 0 °C and 30 °C.


Applications

Hydrogels (for disinfection)

Special features and benefits

For the incorporation, two cases have to be distinguished. If the HClO solution contains up to 2 % NaCl, PURABYK-R 5500 can be added directly as a powder without being pre-mixed with water. If the NaCl content is above 2 %, PURABYK-R 5500 must be pre-mixed with ultrapure water before the HClO solution is added. In both cases, the additive should be added continuously and gradually to the HClO solution or ultrapure water over a period of 10 to 20 minutes (at 20 °C ± 5 °C). It should be stirred fast enough that a turbulent vortex current is formed, so that the powder is well dispersed and clumps are avoided. After complete addition, stirring is continued for 20 minutes and air introduction should be avoided by stirring at the suitable speed and optimal positioning of the stirrer. The time needed for the gel structure to form depends on the salt content of the solution and the quantity of PURABYK-R 5500 that is incorporated.

Recommended use

| | |
|------------------------------|---|
| Hydrogels (for disinfection) |  |
|------------------------------|---|

 especially recommended
  recommended

Recommended levels

2–5 % additive (as supplied) based upon the total formulation, depending on the properties of the formulation to be achieved.

The above recommended levels can be used for orientation. The optimum dosage should be determined by application-related test series.

Incorporation and processing instructions

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This issue replaces all previous versions.