
Technical Information

September 2015
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® = Registered trademark of BASF
in many countries.

Glucopon® 215 UP

Nonionic surfactant for the detergent and cleaner industry.

| | |
|------------------------|---|
| Chemical nature | Aqueous solution of alkyl polyglucoside based on natural, plant origin fatty alcohol C ₈ -C ₁₀ , free of preservatives. |
| PRD-No.* | 30530209 * BASF's commercial product numbers. |
| Appearance | Glucocon® 215 UP is a yellow, cloudy and viscous liquid at room temperature and tends to form sediment. |

Handling and storage

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|-----------------|--|
| Handling | <ol style="list-style-type: none">The storage temperature of Glucocon® 215 UP should not be allowed to exceed 40 °C.Liquid that has solidified or that shows signs of sedimentation should be heated to max. 70 °C and homogenized before it is processed. Please mix sufficiently prior to use.Drums that have solidified or that have begun to precipitate should be reconstituted by gentle heating, preferably in a heating cabinet. The temperature must not be allowed to exceed 60 °C (short time 70 °C). Please mix sufficiently prior to use. This also applies if drums are heated by external electrical elements. Internal electrical elements should not be used because of the localized anomalies in temperature that they cause.Glucocon® 215 UP must be blanketed with nitrogen if it is stored in heated tanks at approx. 50 °C to prevent it from coming into contact with air. Constant, gentle stirring helps to prevent it being discolored or damaged as a result of prolonged contact with electrical elements or external heating coilsPlease refer to the latest Safety Data Sheet for detailed information on product safety. |
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| Materials | <p>The following materials can be used for tanks and drums:</p> <ol style="list-style-type: none">Stainless steel 1.4541 – AISI 321 stainless steel (X6 CrNiTi 1810)Stainless steel 1.4571 – AISI 316 Ti stainless steel (X6 CrNiMoTi 17122) <ul style="list-style-type: none">- Seals have to be stable against aqueous alkali (e.g. Teflon, Teflon coated seals; Klingerit K-Sil C 4500).- Recommended as feed pumps: Screw rod pumps or rotary piston pumps. |
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| Shelf life | Provided it is stored properly and drums are kept tightly sealed, Glucocon® 215 UP has a shelf life of at least two years in its original packaging. |
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Properties

Some physical properties are listed in the table below. These are typical values only and not all of them are monitored on a regular basis. They are correct at the time of publication and do not necessarily form part of the product specification. A detailed product specification is available on request or via BASF's WorldAccount: <https://worldaccount.basf.com> (registered access).

| Glucopon® 215 UP | Unit | Value |
|---|-------------------|--------------|
| Physical form (23 °C) | | liquid |
| Active matter (100%-water content) | % | approx. 64 |
| Water content (EN 13267) | % | approx. 36 |
| pH value (EN 1262, 10% in 15% IPA) | | approx. 12 |
| Density (DIN 51757, 40 °C) | g/cm ³ | approx. 1.13 |
| Pour Point (ISO 3016) | °C | approx. -13 |
| Surface tension (EN 14370, 1 g/l in distilled water, 23 °C)* | mN/m | approx. 28 |
| Wetting (EN 1772, distilled water, 23 °C, 2 g Soda ash/l) | | |
| 0.5 g/l | s | >300 |
| 1.0 g/l | s | approx. 250 |
| 2.0 g/l | s | approx. 70 |
| Foam volume (EN 12728, pg. 1, 40 °C, 2 g/l water at hardness of 1.8 mmol Ca-ions/l, after 30 s) | cm ³ | approx. 300 |

* Applying Harkins-Jordan correction.

Processing instructions

Glucopon® 215 UP is self-preserved via an elevated pH level. Due to this elevated pH, Glucopon® 215 UP is hazy in appearance. By reducing the pH value, e.g. with citric acid to below 8.5 the cloudiness being specific for the product disappears thus also enabling the formulation of clear products. Below pH 11.5 Glucopon® 215 UP is no longer sufficiently protected against microbial contamination, that means the end formulation has to be preserved in a suitable way.

Glucopon® 215 UP exhibits excellent solubility, stability, surface and interfacial activity in concentrated saline and alkaline solutions. It may also be used as a coupling agent in concentrated surfactant systems and in the presence of salt and alkalies. Glucopon® 215 UP is compatible with all other classes of surface active agents. Glucopon® 215 UP can be easily stored and handled at room temperature.

Solubility

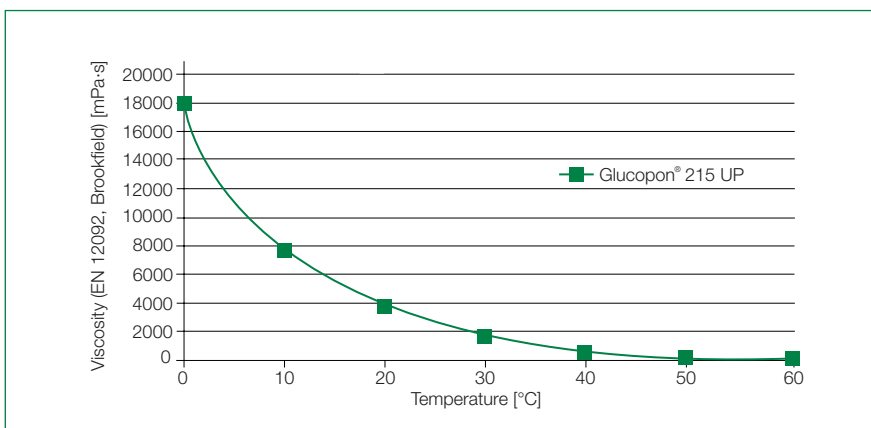
Details on the solubility of Glucocon® 215 UP in various solvents are given in the table below (Solubility 10% at 23 °C).

| | Glucocon® 215 UP |
|---|-------------------------|
| Distilled water | O |
| Potable water (2.7 mmol Ca ²⁺ -ions/l) | O |
| Caustic soda (5%) | O |
| Hydrochloric acid (5%) | ± |
| Salt solution (5%) | O |
| Solvent naphtha | ± |
| Ethanol, Isopropanol | - |
| Aromatic hydrocarbons | - |

+ = clear solution
 ± = sparingly soluble (insoluble sediment)
 - = insoluble (phase separation)
 O = forms an opaque soluble, homogeneous emulsion

Viscosity

The relationship between viscosity and temperature is always an important point to consider when Glucocon® 215 UP is stored or shipped. This is shown in the following graphic (mPa·s, Brookfield LVT):



Viscosity of Glucocon® 215 UP after addition of (23 °C, Brookfield LVT)

| Water addition (%) | Viscosity (mPa·s) |
|---------------------------|--------------------------|
| +10 | 650 |
| +20 | 250 |
| +30 | 80 |
| +40 | 50 |
| +50 | 30 |
| +60 | 20 |
| +70 | <20 |

Safety

We are not aware of any ill effect that can result from using Glucopon® 215 UP for the purpose for which it is intended and from processing it in accordance with current practices.

According to the experience that we have gained over many years and other information at our disposal, Glucopon® 215 UP does not exert harmful effects on health, provided it is used properly, due attention is given to the precautions necessary for handling chemicals, and the information and advice given in our Safety Data Sheets are observed.

Please refer to the latest Safety Data Sheet for detailed information on product safety.

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