Technical Information

April 2013

Glucopon® 225 DK

® = Registered trademark of BASF in many countries.

Nonionic surfactants for the detergent and cleaner industry

BASF
We create chemistry

Chemical character

Aqueous solution of alkyl polyglucosides based on natural, plant origin fatty alcohol C_8-C_{10}, free of preservatives.

PRD-No.*

30528587

* BASF's commercial product numbers.

Properties

Glucopon® 225 DK is a brownish, clear and viscous liquid at room temperature and tends to form sediment in cold.

Glucopon® 225	Unit	Value
Physical form (23 °C)		Liquid
Active matter (100%-water content)	%	approx. 70
Water content (EN 13267)	%	approx. 30
pH value (EN 1262, 20% in 15% IPA)		approx. 8
Density (DIN 51757, 20 °C)	g/cm³	approx. 1.161
Pour Point (ISO 3016)	°C	approx. -13
Surface tension (EN 14370, 1 g/l in distilled water, 23 °C)*	mN/m	approx. 29
Wetting (EN 1772, distilled water, 23 °C, 2 g Soda ash/l)		
0.5 g/l	s	>300
1.0 g/l	s	approx. 280
2.0 g/l	s	approx. 80
Foam volume (EN 12728, pg. 1, 40 °C, 2 g/l water at hardness of 1.8 mmol Ca-ions/l, after 30 s)	cm³	approx. 650

* *Applying Harkins-Jordan correction.*

The above information is correct at the time of going to press. It does not necessarily form part of the product specification. A detailed product specification is available from your local BASF representative.

Solubility

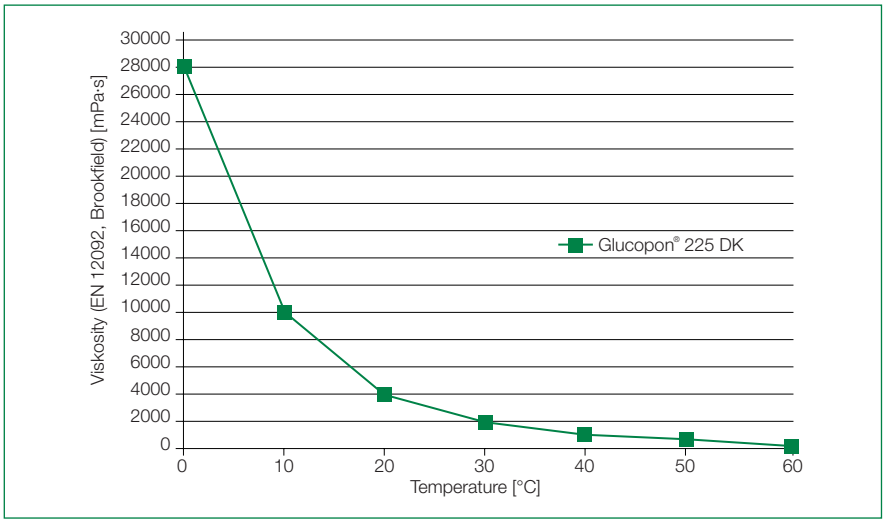
Details on the solubility of Glucopon® 225 DK in various solvents are given in the table below (Solubility 10% at 23 °C).

	Glucopon® 225 DK
Distilled water	+
Potable water (2.7 mmol Ca^{2+}-Ions/l)	+
Caustic soda (5%)	+
Hydrochloric acid (5%)	+
Salt solution (5%)	+
Solvent naphtha	–
Ethanol, Isopropanol	–
Aromatic hydrocarbons	–

+ = *clear solution*
± = *sparingly soluble (insoluble sediment)*
– = *insoluble (phase separation)*
○= *forms an opaque soluble, homogeneous emulsion*

Viscosity

The relationship between viscosity and temperature is always an important point to consider when Glucopon® 225 DK is stored or shipped. This is shown in the following grafic (mPa•s, Brookfield LVT):



Viscosity of Glucopon® 225 DK after addition of (23 °C, Brookfield LVT, all data in in mPa·s)

Water addition (%)	Viscosity
+10	850
+20	250
+30	100
+40	40
+50	20
+60	<20
+70	<20

Storage

a) The storage temperature of Glucopon® 225 DK should not be allowed to exceed 40 °C.

b) Liquid that has solidified or that shows signs of sedimentation should be heated to max. 60 °C and homogenized before it is processed. Please mix sufficiently prior to use.

c) 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. 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.

d) Glucopon® 225 DK must be blanketed with nitrogen if they are stored in heated tanks at approx. 40 °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 coils.

Materials

The following materials can be used for tanks and drums:

AISI 321 stainless steel (1.4541 resp. X6CrNiTi1810)
AISI 316 Ti stainless steel (1.4571 resp. X6CrNiMoTi17122)

Shelf life

Provided it is are stored properly and drums are kept tightly sealed, Glucopon® 225 DK have a shelf life of at least two years in its original packaging.

Safety

We know of no ill effects that could have resulted from using Glucopon® 225 DK 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® 225 DK 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.

Note

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