Technical Information

May 2013

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WF-No. 1490

Agnique® PG 8105-G

® = Registered trademark of BASF

BASF
The Chemical Company

Chemical nature

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

PRD-No.*

30530207

* BASF's commercial product numbers.

Properties

Agnique® PG 8105-G is a yellow, viscous liquid.

Agnique® PG 8105-G	Unit	Value
Delivery form (23 °C)		liquid
Active matter (100%-water content)	%	approx. 63
Water content (EN 13267)	%	approx. 37
pH value (EN 1262, 10% in water)		approx. 12
Density (DIN 51757, 40 °C)	g/cm³	approx. 1.135
Pour point (ISO 3016)	°C	approx. -18
Surface tension (EN 14370, 1 g/l distilled water, 23 °C)*	mN/n	approx. 30
Wetting (EN 1772, distilled water, 23 °C, 2 g Soda/l)		
0.5 g/l	s	>300
1.0 g/l	s	approx. 220
2.0 g/l	s	approx. 80
Foam formation (EN 12728, pg. 1, 40 °C, 2 g/l water at hardness of 1.8 mmol Ca-ions/l, after 30 s)	cm³	approx. 600

** 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 detailled product specification is available from your local BASF representative.

Solubility

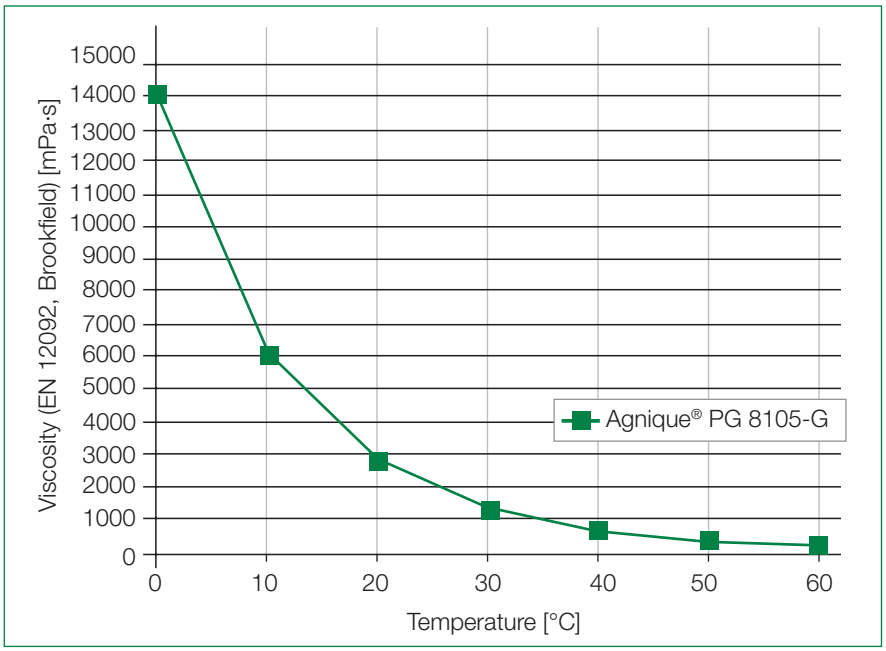
The following table gives an overview of the solubility of Agnique® PG 8105-G in various solvents (solubility 10% at 23 °C).

Solvent	
Distilled water	O
Potable water (2.7 mmol Ca^{2+}-Ions/l)	O
Caustic soda (5%)	O
Hydrochloric acid (5%)	+
Sodium chloride solution (5%)	O
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 Agnique® PG 8105-G is being stored or transported. This is shown in the following graphic chart.



Viscosity according to the temperature.

Viscosity of Agnique® PG 8105-G after addition of (23 °C, Brookfield LVT, all data in in mPa·s)

Water addition (%)	Viscosity
+ 10	700
+ 20	200
+ 30	120
+ 40	50
+ 50	20
+ 60	<20
+ 70	<20

Storage

a) The storage temperature of Agnique® PG 8105-G should not be allowed to exceed 40 °C.

b) Liquid that has solidified or that shows signs of precipitation should be heated to approx. 60 °C and rehomogenized before it is processed.

d) 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. 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.

e) Agnique® PG 8105-G 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:

a) AISI 321 stainless steel (1,4541 resp. X6CrNiTi1810)
b) AISI 316 Ti stainless steel (1,4571 resp. X6CrNiMoTi17122)

Shelf life

Provided they are stored properly and drums are kept tightly sealed, the Agnique® PG 8105-G has a shelf life of at least two years in their original packaging.

Safety

We know of no ill effects that could have resulted from using the Agnique® PG 8105-G for the purposes for which they are intended and from processing them in accordance with current practice. According to the experience that we have gained over many years and other information at our disposal, the Agnique® PG 8105-G do not exert any harmful effects on health, provided they are used properly, due attention is given to the precautions necessary for handling chemicals, and the information and advice given in the Safety Data Sheets are observed.

Labelling

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

Note

May 2013