
Technical Information

Lugalvan® BNO 12

Nonionic surfactant for the electroplating industry and the chemical and allied industries.

Auxiliary brightener for the electroplating industry.

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09_080653e-01/Page 1 of 4

® = Registered trademark of BASF in many countries.



We create chemistry

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).

Lugalvan® BNO 12	Unit	Value
Physical form (25 °C)		Highly viscous liquid
Concentration (calculated)	%	approx. 99.5
Water content (EN 13267)	%	max. 0.5
Cloud point (EN 1890)* Method B Method C	°C °C	approx. 59 approx. 71
Congealing point (ISO 2207)	°C	approx. 18
pH value (ISO 976, 10% in dist. Water, 23°C)**		approx. 6.5
Density (DIN 51757, ASTM D 1298, Hydrometer, 20 °C)	g/cm ³	approx. 1.14
Viscosity (DIN 51562 part 1, ASTM D 445, 40 °C)	mm ² /s	approx. 140
Wetting power (EN 1772, dist. Water, 2 g Soda ash/l) 0,5 g/l, 23 °C 1,0 g/l, 23 °C 2,0 g/l, 23 °C	 s s s	 > 300 > 300 > 300
Surface tension*** (EN 14370, 1 g/l, 23 °C, dist. Water)	mN/m	approx. 52

* Cloud point according to EN 1890:

Method B: 1 g of surfactant + 100 g of NaCl solution (c = 50 g/l)

Method C: 1 g of surfactant + 100 g of NaCl solution (c = 100 g/l)

** The pH of Lugalvan® BNO 12 can decrease during storage, but this does not have any effect on his performance.

*** Applying Harkins-Jordan correction.

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The relationship between the viscosities of Lugalvan® BNO 12 and temperature is shown in the following table (approx. values in mm²/s)

20 °C	510
30 °C	250
40 °C	140
50 °C	85
60 °C	55

The relationship between the densities of Lugalvan® BNO 12 and temperature is shown in the following table (approx. values in g/cm³)

20 °C	1.14
30 °C	1.13
40 °C	1.12
50 °C	1.11
60 °C	1.10

Safety

We are not aware of any ill effect that can result from using Lugalvan® BNO 12 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, Lugalvan® BNO 12 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.

Labelling

Please refer to the safety data sheet for information on classification & labelling, safe use, handling and transport.

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