
Technical Information

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Lugalvan[®] HS 1000

® = Registered trademark of
BASF Aktiengesellschaft

Product used to formulate brightener additives for the electroplating industry

BASF

Lugalvan HS 1000

Chemical nature

Thiodiglycol ethoxylate

Properties

Physical form	Yellowish or brownish, waxy solid
Water content (DIN 51777, Part 1, ASTM D 1744)	max. 1%
Iodine colour (DIN EN 1557, 40 °C),	max. 12
Density (DIN 51757, 40 °C, ASTM D 1298)	1.11–1.13 g/cm ³
Viscosity (DIN 53019, 40 °C)	100–160 mPa·s
pH (ISO 976, 10%)	6.0–7.5
Setting point (ISO 3016)	24–30 °C

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

Lugalvan HS 1000 is easy to dissolve in water when it has been melted.

Storage

Lugalvan HS 1000 has a shelf life of two years in its sealed original packaging, provided it is stored properly.

Application

Lugalvan HS 1000 is used to formulate brightener additives employed in the electroplating industry.

It is especially effective in brightener formulations for acid zinc electrolytes. It is usually employed at a concentration of 0.1–5 g/l.

Lugalvan HS 1000 has the following advantages in acid zinc electrolytes:

- It prevents charring at high current densities.
- It improves the ductility of the plated metal at high current densities.
- It improves the brightness of the plated metal over the whole range of current densities.
- It performs very well in combination with nonionic and anionic surfactants.
- It is low-foaming.
- It suppresses the formation of foam, especially in combination with Lugalvan NES.
- Its solubilizing action on Lugalvan TC-BAR is comparable to that of Pluriol E 400 or E 600.
- It has no effect on the cloud point of the bath.

Safety

We know of no ill effects that could have resulted from using Lugalvan HS 1000 for the purpose for which it is intended and from processing it in accordance with current practice.

According to the experience we have gained over many years and other information at our disposal, Lugalvan HS 1000 does not exert any harmful effects on health, provided that 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 sheet are observed.

Note

The information submitted in this publication is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors of the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.

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