# **Technical Bulletin**





#### **Description**

Pluriol<sup>®</sup> E 600 LS is a polyethylene glycol that is 100% active. It is a clear almost colorless, odorless, viscous liquid. Pluriol<sup>®</sup> E 600 LS is heat stable and hygroscopic with a low vapor pressure. It is soluble in water, acetone, ethanol, ethyl acetate and toluene.

#### **Applications**

Chemical Intermediates: The two primary hydroxyl groups of the polyethylene glycols may undergo typical alcohol reactions to form monoesters, diesters, ethers, acetals and amines.

Resins: In the production of alkyl resins, the substitution of the polyethylene glycol for some of the glycerine produces resing of greater flexibility. Polyethylene glycol fatty esters are useful plasticizers for vinyl resins and other materials.

Specifications	
pH (5% aqueous)	4.5 – 7.5
Color (APHA)	25 max.
Water. % weight	0.2 max
Typical properties	
Form	Liquid
Average molecular weight (calculated)	600
Specific gravity, 25°/25°C	1.1.25
Viscosity CS @ 99°C	10.8
Pour point, °C	20
Cloud point (1% aqueous), °C	>100
Foam height(Ross Miles, 0.1% aqueous @ 50°C), mm	0
Surface tension (0.1% aqueous @ 25°C), dynes/cm	65
Flash point (C.O.C.), °C	249
Solubility in water, % weight	>10

Rubber: Polyethylene glycols are used as lubricants for the air bags in pneumatic tires. Use to date has indicated no adverse effect on rubber.

Cellulosic Materials: Suitable as paper softeners because of humectant properties and low vapor pressure. They are also used as plasticizers in the manufacture of uncoated cellophane and cellulose sponges.

Textiles & Leather: Polyethylene glycols and their fatty acid derivatives are used for such varied purposes as emulsification, washing, lubrication, static prevention, pigment dispersion and softening.

*Printing:* Polyethylene glycols are used in the production of steam set printing inks. When used in combination with the ethylene and diethylene glycols, they control the amount of moisture pickup in the setting of inks.

### Storage and Handling

Storage in mild steel is not recommended. Objectionable iron pickup with resultant discoloration can be avoided by storage in resinlined steel, aluminum or glass containers. The melting or freezing range is  $37 - 40^{\circ}$ C and tanks may need to be equipped with heating coils to maintain these products in a fluid state.

Storage temperature should not exceed the melting/freezing range by more than 20°C. Multiple cycles of heating the product to a fluid state, such as drums or totes, opening the container causing it to be subjected to air and then cooling the product may cause degradation to both product and packaging.

### **Shelf Life**

BASF will endorse the results on the certificate of analysis for a period of up to 2 years from the date of manufacture for material in original, unopened, properly stored containers. Beyond 2 years, we recommend the quality of the material be confirmed prior to use, by retesting the certificate of analysis parameters.

Please refer to the Material Safety Data Sheet (MSDS) for this product for instructions on safe and proper handling and disposal.

Pluriol® is a registered trademark of BASF in many countries

#### For More Information:

## **Order Placement**

To place orders for delivery in the United States or Canada, please call our toll free number (800) 443-6460.

# For Other Information

Including product literature and Material Safety Data Sheets please call (734) 324-6101.

# Or Visit Our Website At:

www.performance.basf-corp.com

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