

BARAGEL[®] 24

Rheological Additive for Lubricating Grease Manufacture

GENERAL INFORMATION

BARAGEL 24 rheological additive is an organic derivative of a special smectite clay. It is specifically designed to improve thickening efficiency in synthetic and other organic fluids of medium- to high-polarity.

CHEMICAL AND PHYSICAL DATA

Composition	Organically modified smectite clay
Color	Very light cream
Form	Finely divided powder
Density	1.70 g/cm ³

These are typical properties not to be used for specification purposes.

APPLICATIONS

BARAGEL 24 is an effective gellant for naphthenic oils, esters, polyalkylene glycols and certain silicone fluids.

KEY PROPERTIES

- Ease of manufacturing
- Resistance to melting
- Resistance to oil separation
- Excellent work stability
- Wide range temperature application

INCORPORATION

Equipment

BARAGEL 24 rheological additive can be readily blended into oils and fluids using normal grease equipment. The product produced must be sheared through a colloid mill or homogenizer to obtain maximum yield.

Process

Grease is generally manufactured at room temperature and requires no heat for the gelation of the oil. The normal process briefly is:

1. Mix the **BARAGEL 24** into a portion or all of the base fluid
2. Add a suitable polar activator* such as propylene carbonate, methanol or acetone at about 20 % w/w of **BARAGEL 24**
3. Mix until a significant increase in viscosity occurs
4. Add the remaining base fluid (if less than the total amount was used initially) and any other desired additives
5. Mill

*Polar Activators

Below are common polar activators with typical starting point use levels. Polar activator level should be optimized for each grease formulation.

	<i>Use range based on weight of organoclay</i>
Acetone	25-40 %
Methanol/Water (95/5)	7-20 %
Ethanol/Water (95/5)	12-28%
Propylene carbonate	8-25 %

LEVEL OF USE

Typically 7 -10 % **BARAGEL 24** rheological additive is required. A concentration loading study is recommended to optimize the level of addition.

HEALTH AND SAFETY DATA

Before using this product please consult our Safety Data Sheet (SDS) for information on safe handling and storage. The SDS can be found on the company website.

QUALITY ASSURANCE

Since 1992 the company is a holder of the ISO 9001 / ISO 9002 certificates, which guarantees that all operations are conducted according to the stipulated standards.

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