

BARAGEL®

RHEOLOGICAL ADDITIVE FOR LUBRICATING GREASE MANUFACTURE

GENERAL INFORMATION

BARAGEL rheological additive is a gellant for a wide range of mineral oils, synthetic and other organic fluids of medium to low polarity.

CHEMICAL & PHYSICAL PROPERTIES

Composition	Quaternary ammonium bentonite
Color	Light buff
Fineness	95% through 200 mesh
Particle size (dispersed) maximum dimension	0.8 by 0.8 by 0.0025 micron
Form	Finely divided powder
Moisture	3.0% maximum
Density	1.6 g/cm ³ , 13.3 (lbs./US gal.)
Bulk Density	0.3 g/cm ³ , 2.6 (lbs./US gal.)
Loss on Ignition	39%

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

APPLICATIONS

- Lubricating greases based on medium to high VI paraffinic oils
- Synthetic oils
- Other organic fluids
- These greases find application in mining, farming, military and metal refining.

KEY PROPERTIES

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

INCORPORATION

BARAGEL 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 additive with ½ to all of the oil.
2. Add polar activator* and mix until gelation occurs.
3. Add remaining oil and additives.
4. Mill

*Polar Activators

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

	Use range based on <u>weight of organoclay</u>
Acetone	25-40%
Methanol/ H ₂ O 95/5	7-20%
Ethanol/ H ₂ O 95/5	12-28%
Propylene Carbonate	8-25%

HEALTH AND SAFETY

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.

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BARAGEL®**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.

NOTE: The information herein is currently believed to be accurate. We do not guarantee its accuracy. Purchasers shall not rely on statements herein when purchasing any products. Purchasers should make their own investigations to determine if such products are suitable for a particular use. The products discussed are sold without warranty, express or implied, including a warranty of merchantability and fitness for use. Purchasers will be subject to a separate agreement which will not incorporate this document.

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North America

Elementis
469 Old Trenton Road
East Windsor
NJ 08512, USA
Tel.: +1 609 443 2500
Fax: +1 609 443 2422

Europe

Elementis UK Ltd.
c/o Elementis GmbH
Stolberger Strasse 370
50933 Cologne, Germany
Tel.: +49 221 2923 2066
Fax: +49 221 2923 2011

Asia

Deuchem (Shanghai) Chemical Co., Ltd.
99, Lianyang Road
Songjiang Industrial Zone
Shanghai, China 201613
Tel.: +86 21 5774 0348
Fax: +86 21 5774 3563