

ZHEJIANG FENGHONG NEW MATERIAL CO., LTD.

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HFGEL-120-Q Rheology Modifier

GENERAL INFORMATION

HFGEL-120-Q is an organoclay for solvent-based systems of low to medium polarity.

ADVANTAGES

- ☆ High gelling efficiency over low to medium polarity organic liquids.
- ☆ High viscosity and excellent thickening property over a wide temperature range.
- ☆ Imparts particle suspension, owns anti-corrosion property and temperature resistance property.
- ☆ Exerts strong film reinforce action in organic binder systems.
- ☆ High Purity.

PHYSICAL PROPERTES	RECOMMENDED USE
Appearance: Free flowing powder	 Naphthenic Oil Based and Paraffinic Based Mineral Oil Lubricating grease
Color/Form : Light white	 Synthetic Oil Lubricating grease
Density: 1.70g/cm3	 Vegetable Oil Lubricating grease
Moisture(@105°C,2hrs): ≤3.5%	
Fineness: 98.0%Min thru 200 mesh	

INCORPORATIONS

HFGEL-120-Q belongs to the conventional type of organoclay group, which requires mechanical energy, shear forces applied with a good dispersion equipment, and a chemical (polar) activator to reach the proper level of delamination of the organoclay platelet stacks.

Chemical Activator	
Methanol/H ₂ O & Ethanol/H ₂ O (95/5)	12%-40% by weight of HFGEL-120-Q
Propylene Carbonate	25%-40% by weight of HFGEL-120-Q
Acetone/H ₂ O	25%-40% by weight of HFGEL-120-Q

It is always recommended to determine the proper level of addition by experiment. Either



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defect or excess of chemical activator would result in poorer viscosity development. Recommended Procedures:

- (1)Heat the specific oil to $60^{\circ}\text{C} \sim 70^{\circ}\text{C}$.
- (2)Add HFGEL-120-Q (8-15% by weight of total formula), mill for 5-10min.
- (3)Add polar activator (12-40% by weight of organoclay), then add other additives, mill for 25-30min.
- (4)Using pump for getting through colloid grinding or homogenizer.
- (5)Remove air, filtrate and package.

Increasing dispersion speed, prolong dispersion time or enhance the temperature will improve the efficiency of HFGEL-120-Q.

RECOMMENDED LEVELS

The amount of HFGEL-120-Q rheology modifier required depends upon the type of organic system and the degree of thickening or other properties desired. Addition levels are typically between 8%-15% by weight of the oil.

HEALTH AND SAFETY DATA

Before handling this material, read the corresponding Safety Data Sheet (SDS) for safety, health and environmental data.

SHELF LIFE

HFGEL-120-Q has a shelf life of at least two years from date of manufacture. Store in a cool dry place.

CERTIFICATIONS

ISO 9001 Quality System, ISO 14001 Environmental Management System, ISO 18001 Safety System

MANUFACTURER: ZHEJIANG FENGHONG NEW MATERIAL CO., LTD.

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