

Rheology Additive

Thixoster™

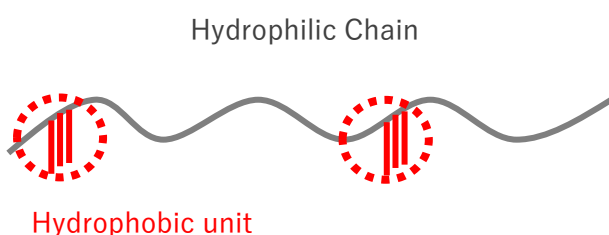
- ◆ Thixoster, amphiphilic polyurethane material, is a water-soluble material based on polyethylene glycol (PEG) with hydrophobic comb-shaped diol.
- ◆ It can impart thickening and thixotropic properties when added to a solution
- ◆ It can be used as a binder for ceramics, as a paint additive, and as a thickener for mortar extrusion molding.

PRODUCT OVERVIEW

Ether-Based Amphiphilic Polyurethane

This polyurethane features a unique molecular structure composed of a hydrophilic main chain and hydrophobic side groups.

The image of the polymer structure



Product Name	Thixoster® 50 K
Physical Form	White powder
Molecular Weight	Mn 270,000 Mw 1,050,000
Viscosity of 2% Aqueous sol.	Approx. 50,000 ,mPa · s
Melting point	60 °C
Carbonization Temp.	280 ~ 300°C

PRODUCT FEATURE

Viscosity

Obtain viscosity to water and some polar organic solvent

Rheology/Thixotropy

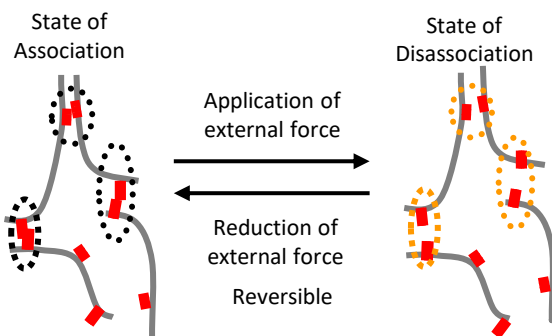
Obtain thixotropy when external force is applied

Non-ionic organic compound

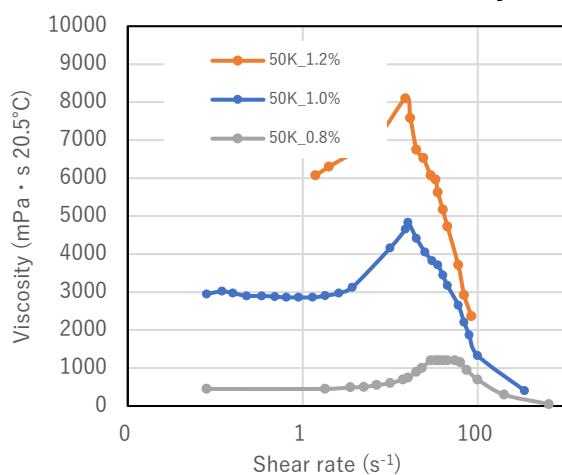
odorless white powder, completely combustion in certain conditions

Contact information

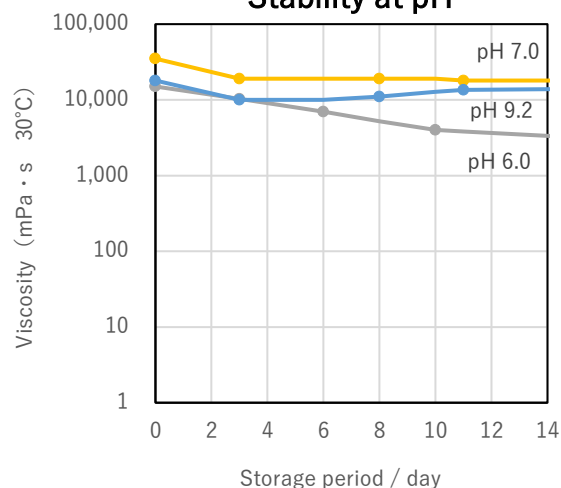
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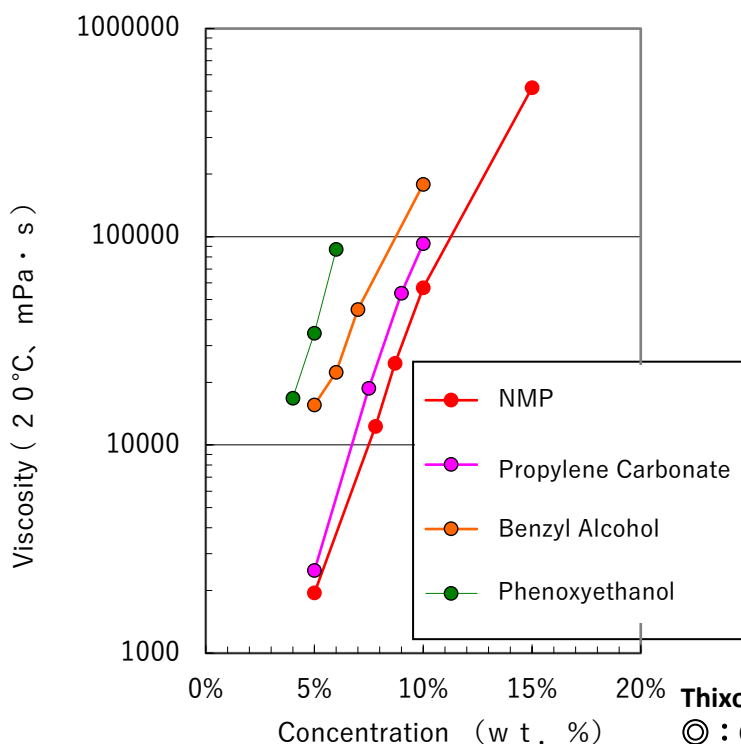
Concentration vs Viscosity



Stability at pH



SOLVENT SOLUBILITY



Solvent	Solubility
Methanol	○
Ethanol	△
MEK	△
THF	○
Toluene	△
Benzyl Alcohol	◎
Phenoxyethanol	◎
Acetonitrile	○
DMF	◎
DMSO	◎
NMP	◎
Propylene Carbonate	◎

Thioxester Solubility at 5%

- ◎ : Completely soluble at room temperature(r.t.)
 ○ : Partially soluble at r.t. , Completely soluble at 60 °C
 △ : Insoluble at r.t., Completely soluble at 60°C

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