

1. Feature

- **Good dispersibility especially for particles with <100 nm.** It prevents particulates from flocculation and reduces the viscosity of dispersion liquid.
- **High content of active constituent (100%)** and low content of impurities (alkaline metal and halogen free).
- **Good solubility** for various solvents.
- **Easy to decompose clean** (residue: less than 1% at 400°C).

2. Typical properties, solubility and regulatory information

		MP-071K
Properties	Appearance (at 25°C)	reddish brown liquid
	Viscosity (mm ² /s, at 100°C)	70
	Acid-base	acidity
Solubility* ¹	Water	○
	Ethanol	○
	Methyl ethyl ketone (MEK)	○
	2- (2-Butoxyethoxy) ethyl acetate	○
	Terpineol	○
	Toluene	○
Regulatory* ²	ENCS (Japan)	○
	TSCA (USA)	×
	IECSC (China)	×
	ECL (Korea)	×
	ECN (Taiwan)	×

Representative values, not values of standard.

*1 ○:transparent, ×:phase separation (5wt%, at 25°C)

*2 ○:On list, ×:Not on list

3. Additive amount (suggested)

The additive amount of ESLEAM™ MP-071K is normally from 0.5 to 10wt% (for powder weight). As the optimal additive amount strongly depends on particle size or surface area of powder, we recommend some test using different amount of the product to determine the optimal additive amount.

4. Result of dispersing test

Powder : TiO_2

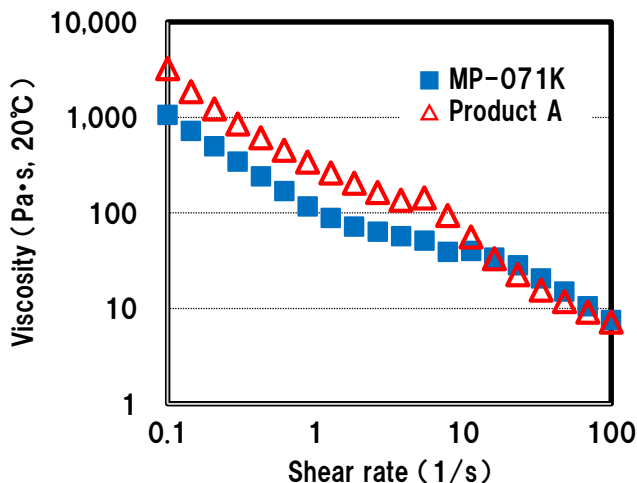
(Average particle size : 50 nm,

Surface area : $28.0 \text{ m}^2/\text{g}$)

Solvent : Ion-exchanged water

Slurry concentration : 65wt%

Additive amount : 10wt% (vs. powder weight)



(Product A: Ammonium polyacrylate, Product B : Phosphate type)

Powder : BaTiO_3

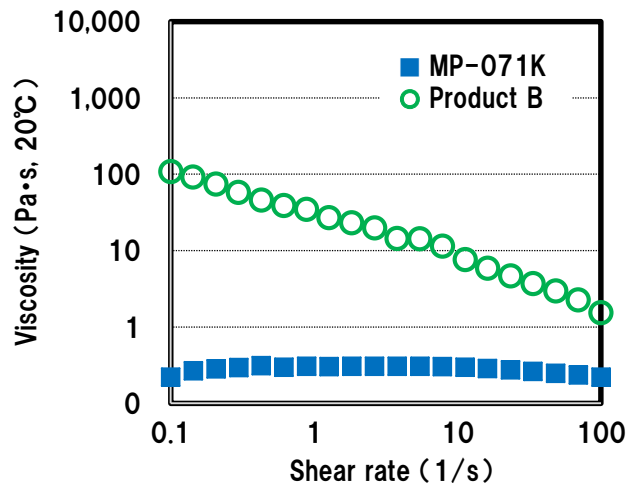
(Average particle size : 50 nm,

Surface area : $21.4 \text{ m}^2/\text{g}$)

Solvent : Toluene / Ethanol = 1/1 (wt./wt.)

Slurry concentration : 80wt%

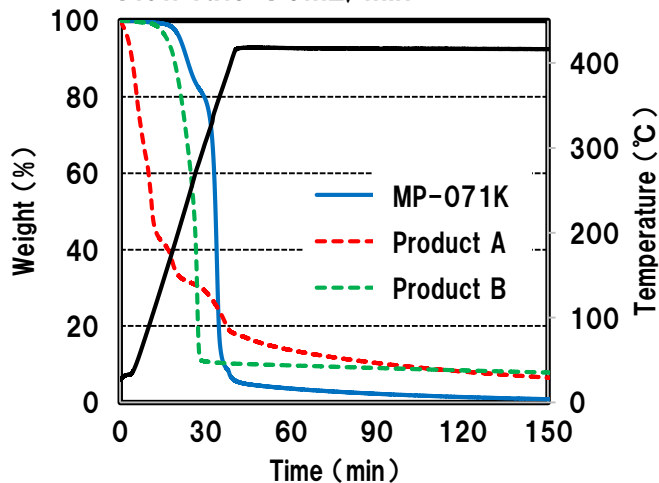
Additive amount : 5wt% (vs. powder weight)



5. Thermogravimetric analysis

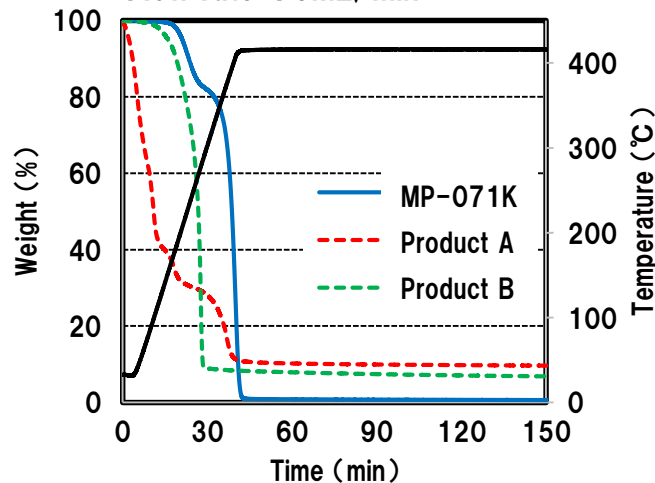
<Under Air atmosphere>

Flow rate: 75mL/min



<Under Nitrogen atmosphere>

Flow rate: 75mL/min



6. Other information

This catalogue is made by NOF CORPORATION based on our best knowledge and all of listed data are reference only. (not guaranteed) We recommend to refer our SDS before using our products and special attention should be paid in handling because all chemicals have unknown hazard.

Please contact us when you have any other question.

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