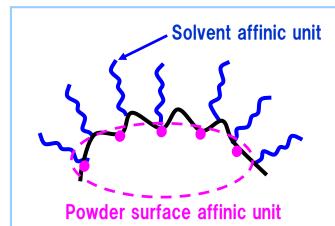
ESLEAMTM AD Series

1 ESLEAMTM AD Series

ESLEAMTM AD Series are new functional polymers that have powder surface affinic unit and solvent affinic unit, which can be used as dispersant both for inorganic and organic powders.



Solvent affinic unit

It gives steric-repulsion effects or acts as segments improving dissolution.

Powder surface affinic unit

It acts as segments that adsorb on to the surface of powder.

Molecular structure of ESLEAM™ AD Series (Image)

By optimizing the units, ESLEAM™ AD Series show excellent dispersibility to particulates.

2 Features

- It prevents particulates from flocculation and reduces the viscosity of dispersion system.
- ◆ 100% active constituent and low viscosity, easy to handle.
- ◆ High solubility for various solvents.
- lacklosh Thermal decomposition point at about 400°C under N_2 atmosphere.

3 Properties

Item	ESLEAM™ AD-3172M	ESLEAM™ AD-374M	ESLEAM™ AD-508E
Appearance (at 25℃)	Pale yellow or yellow liquid		
РН	10		(Insoluble)
Viscosity (mm²/s, at 25℃)	600	500	1, 700
Density (g/ml, at 25℃)	1. 06	1. 02	0. 98

(Representative values, not values of standard.)

4 Solubility

Item	ESLEAM™ AD-3172M	ESLEAM™ AD-374M	ESLEAM™ AD-508E
Water	0	Δ	×
Ethanol	0	0	0
2-Buthoxyethanol	0	0	0
Terpineol	0	0	0
Acetone	0	0	0
2-Acetoxy-1- methoxypropane	0	0	0
Ethyl methyl ketone (MEK)	0	0	0
Hexane	×	Δ	0
Toluene	0	0	0

O:soluble, △:emulsification, ×:insoluble (5wt%solution, at 25℃)

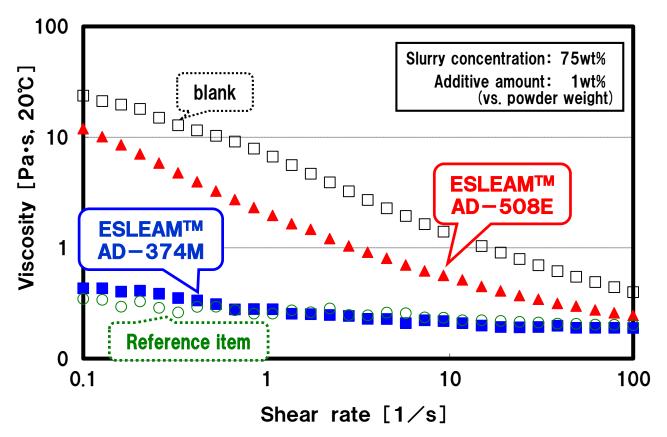
5 Additive amount

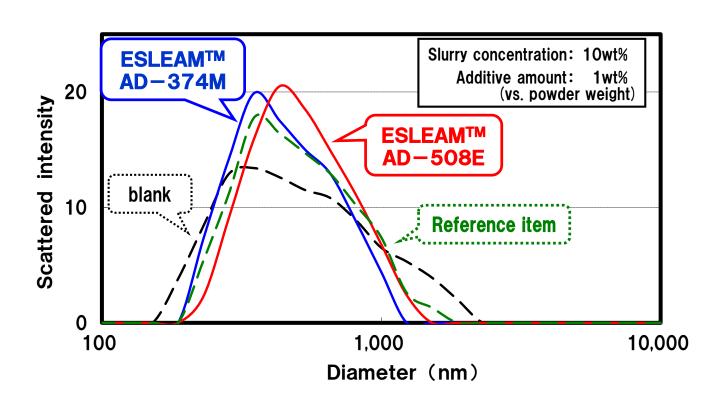
The additive amount of ESLEAMTM AD Series is normally from 0.5 to 5wt% (for powder weight). As the optimal additive amount strongly depends on particle size or surface area of powder, we recommend some test using different amount of the product to determine the optimal additive amount.

6 Result of dispersing test

Powder: Ag (Particle size: 0.7 \(\mu \) m)

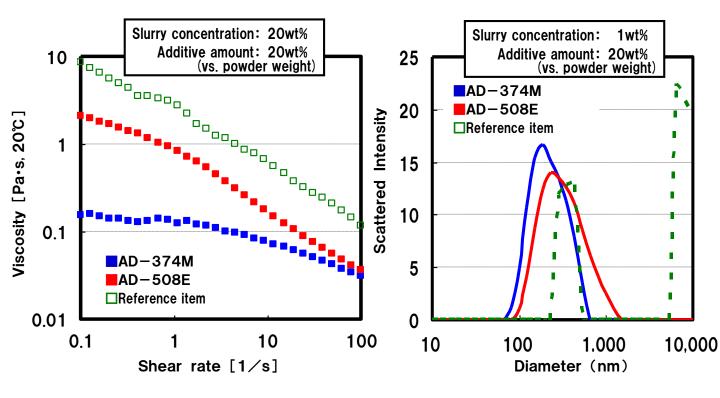
Solvent: Terpineol





Powder: Carbon black (Particle size: 24nm)

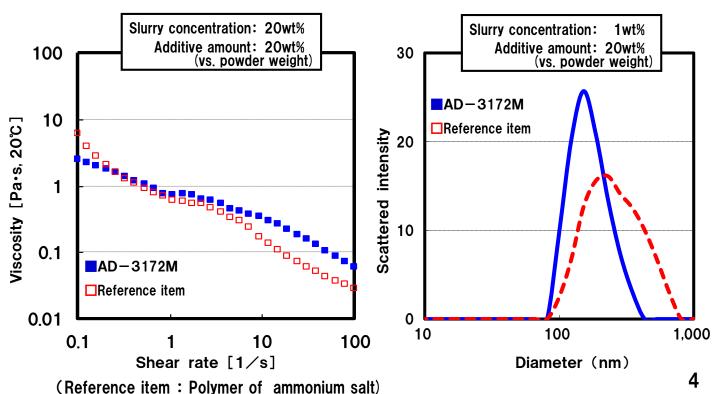
Solvent: Propyleneglycol monomethylether acetate (PGMEA)



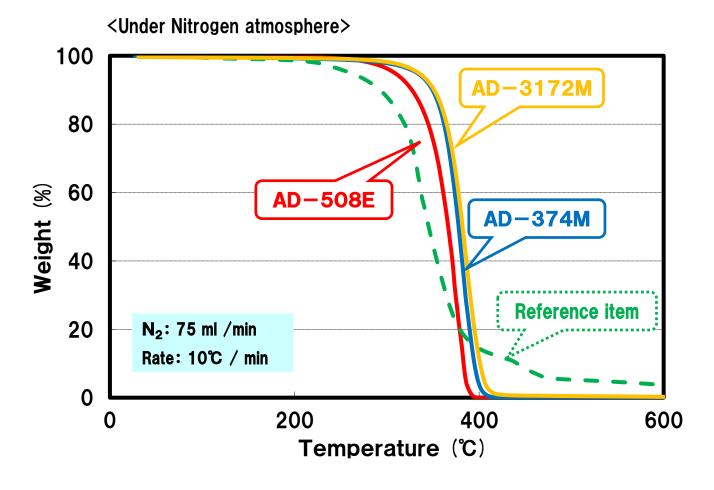
(Reference item: N, N-dipolyoxyalkylene-N-alkylamine)

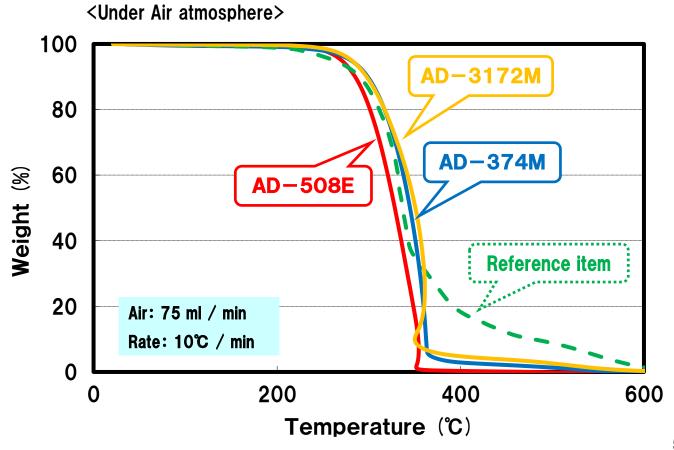
Powder: Carbon black (Particle size: 24nm)

Solvent: water



7 Thermogravimetric analysis





8 Regulatory information

	ESLEAM™ AD-3172M	ESLEAM™ AD-374M	ESLEAM™ AD-508E
TSCA	0	0	×
IECSC	0	0	×
ECL	0	0	×
ECN	0	0	0

○:On list, ×:Not on list

For more detail, Safety Data Sheet (SDS) in available.

9 Cautions on handling

For more detail, Safety Data Sheet (SDS) in available.

10 Other information

This catalogue is made based on our best investigation, but, about data and the evaluation result of mention, is not necessarily a thing to guarantee. Because there is unknown hazardousness to all chemical substances, scrupulous attention is necessary for the handling. On the responsibility of the user members, we hope that safe terms of use are set. In addition, please use safety measures suitable for a use when you do the special handling.

Please refer to our sales representative for other any questions.



^{*}Please ask us regarding the registration status of REACH for each product.