

AQUPEC

Self-Wetting series

INCI Name : Carbomer

Cas No. : 9003-01-4

INCI Name : Acrylates/C10-30 Alkyl Acrylate Crosspolymer

Cas No. : Registered

Feature

- Short dissolving time → saving production cost
- Low viscosity in un-neutralized dispersion → easy to make high polymer concentration solution

Self-Wetting performance

Self-Wetting series

SW-703ER

SW-705ER

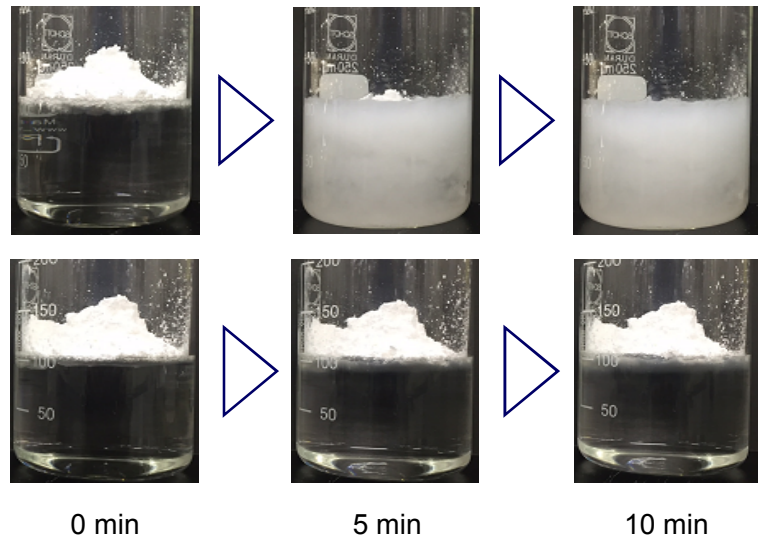
SW-705E

Conventional series

HV-501ER

HV-505E

HV-505HC



Self-Wetting series quickly disperse in water without agitation.

Specification

			Acrylates/C10-30 Alkyl Acrylate Crosspolymer		Carbomer
			SW-703ER	SW-705ER	SW-705E
Appearance	--	[—]	White powder	White powder	White powder
Viscosity	0.5%	[mPa·s]	--	45,000-65,000	45,000-65,000
	1.0%	[mPa·s]	47,000-67,000	--	--
Salt Viscosity	1.0%+ 1%NaCl	[mPa·s]	4,000 MIN.	--	--
Clarity	0.5%	[%]	--	92 MIN.	88 MIN.
	1.0%	[%]	90 MIN.	--	--
Wetting time	0.5%	[min]	--	6 MAX	8 MAX
	3.0%	[min]	15 MAX	--	--

Application

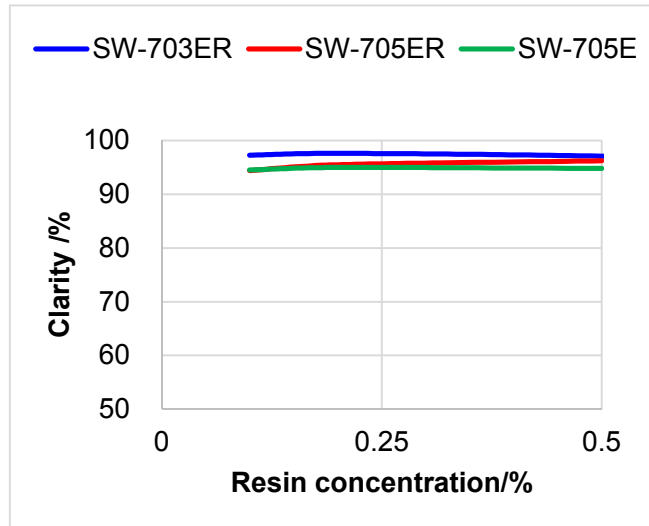
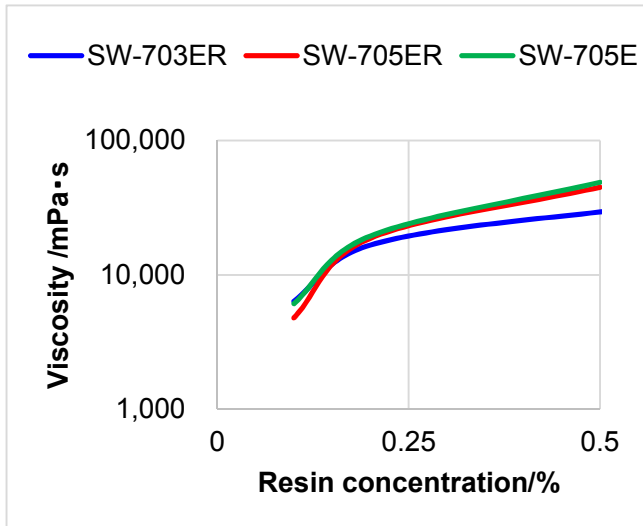
Sanitizing gel

Cream

Lotion

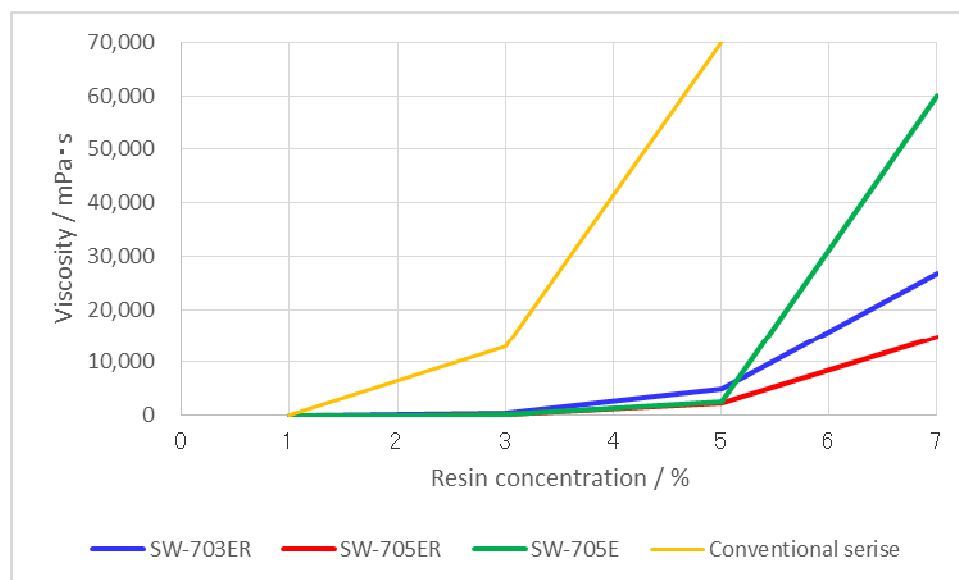
Typical Data

Viscosity and Clarity of neutralized aqueous solution



Gels with Self-Wetting series show high clarity and viscosity.

Unneutralized Viscosity



Aqueous solutions of Self-wetting series show much lower viscosity than thoes of conventional series.

→ Easy to make high polymer concentration solution.

Formulation example

Sanitary Gel



	Carbomer	Acrylates/ C10-30Alkylacrylate Crosspolymer	
Grade	SW-705E	SW-703ER	SW-705ER
Viscosity [mPa·s]	6,600	4,950	4,900
Clarity [%]	93	96	92

Highly clear sanitary gels can be prepared with Self-Wetting series.

Ingredients

	INCI	Function	w/w%
1	WATER	Diluent	36.37
2	Carbomer / Acrylates/C10-30Alkylacrylate Cross polymer	Thickener	0.25
3	Ethanol	Sanitizer	63.00
4	Glycerin	Humectant	0.10
5	Diisopropanol Amine (50% aqueous solution)	Neutralizer	0.28
Total			100.00

Procedure

- 1 Distilled water was added to beaker.
- 2 Polymer was slowly added to the beaker under stirring and mixed until uniform.
- 3 DIPA 50% aq. was slowly added under stirring and mixed until gel was homogeneous.
- 4 Glycerin and ethanol were added under stirring and mixed until gel was homogeneous.