

*Thickener for fabric softener*

*-Resoft 909*

# *Product introduction*

Resoft 909(INCI name: Acrylamide/Acryloyloxyethyl Trimethyl Ammonium Chloride Copolymer & Paraffinum Liquidum & C11-15 Pareth-7)

01

Cationic thickener, used for fabric softener, can give the end product a thick appearance

02

Liquid state, easy to use, no need neutralize and premix

03

Easy to disperse in cold water and can be added in any step of production

04

Shows good compatibility with esterquat

# *Specification*

<b>Index</b>	<b>Specification</b>
Appearance (25°C)	Milky white liquid
Solid content (105°C, 3h, %)	60.0-75.0
pH (2% aqueous solution)	3.0-6.0
Emulsion viscosity (25°C, M3V20, mPa·s)	500-4500
2% aqueous solution viscosity(25°C, M4V12, mPa·s)	3000-11000

# Application



## Fabric softener

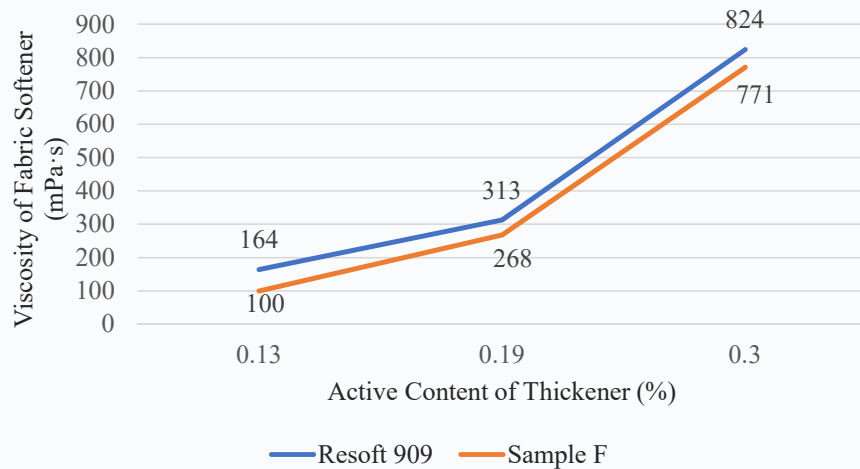
- ✓ Cationic surfactant is the main raw material for fabric softener, which can neutralize the residue of liquid laundry detergents. After washing, it can make the fiber surface soft, smooth, antistatic and not easy to stain ash. Resoft 909 is a cationic thickener suitable for cationic system. It can prepare efficient fabric softener when used with esterquat.

## Toilet Cleaner

- ✓ Toilet cleaner without viscosity will make it difficult to hang on the wall, thus affecting the cleaning ability. Resoft 909 has thickening effect on acidic system and can be used with hydrochloric acid or citric acid to prepare toilet cleaner with certain viscosity.



# Thickening properties



	Thickener	Dosage (%)	Viscosity (25°C, M2V30, mPa.s)
A	Resoft 909	0.8	824
	Sample F	0.53	771
B	Resoft 909	0.5	313
	Sample F	0.33	268
C	Resoft 909	0.35	164
	Sample F	0.23	100

## Reference formula

Fabric Softener		
	Ingredient	Percentage
A	Water	41.4
	Requat EQ90	4.6
B	Water	To 100
	Thickener	q.s
C	MIT	0.1

**Conclusion** : The application performance is evaluated by the above formulation and procedure with the same active of the thickener. The data shows a better thickening efficiency of Resoft 909 compared with sample F. (Sample F is the same type of product of competitor).

# Reference formula

Fabric Softener		
	Ingredient	Percentage
A	Water	41.4
	Ammonium Dipalmitate Ethyl Hydroxyethyl Methyl Sulfate (EQ)	4.6
B	Water	To 100
	Acrylamide/Acryloyloxyethyl Trimethyl Ammonium Chloride Copolymer & Paraffinum Liquidum & C11-15 Pareth-7 (Resoft 909)	0.4
C	Methylisothiazolinone (MIT)	0.1
	Frangrace	q.s

## Procedure :

- 1、 Add part A into vessel 1 and heat to 50-55°C, stir them until paste dissolves, then cool down to room temperature.
- 2、 Add part B into vessel 2 with stirring until uniform.
- 3、 Add part A to part B with stirring until uniform.
- 4、 Gradually add the remaining ingredients and stirring until uniform.
- 5、 Testing and packing.

pH (10% aqueous solution)	3.0
Viscosity (25°C, M2V30, mPa·s)	210

# Reference formula

Toilet Cleaner		
	Ingredient	Percentage
A	3% Citric Acid	To 100
	Acrylamide/Acryloyloxyethyl Trimethyl Ammonium Chloride Copolymer & Paraffinum Liquidum & C11-15 Pareth-7 (Resoft 909)	1.5
B	Frangrace	q.s

## Procedure :

- 1、 Add part A into the vessel with stirring until uniform.
- 2、 Add the remaining ingredients into the vessel with stirring until uniform.
- 3、 Testing and packing.

pH	2.5
Viscosity (25°C, mPa·s)	920

## *Conclusion*

**Resoft 909** (INCI name: Acrylamide/Acryloyloxyethyl Trimethyl Ammonium Chloride Copolymer & Paraffinum Liquidum & C11-15 Pareth-7)

1. A liquid, easily soluble in water and no neutralization cationic thickener
2. Excellent compatibility with EasterQuat, highly effective thickening fabric softener and toilet cleaner.



# T H A N K   Y O U

**Address:** FL.3, No.E2 Longshan Industry Zone, Yinglong Road, Tianhe District, Guangzhou, China

**Website:** [www.reachinchem.com](http://www.reachinchem.com)

**E-mail:** [helena@reachinchem.com](mailto:helena@reachinchem.com)