



### Synergistic thickening property of different amine oxide with lauryl glucoside

This study is helpful for you to choose right product is you use amine oxide products as a synergistic thickening agent, especially in a non-ionic solution, which contains APG as a main surfactant.

We are going to make four different sample, the recipe is as follows:

#### Sample A

Ingredients	Dosage(wt%)
Lauryl glucoside (BP-1200)	30
Lauramidopropylamine Oxide (LAO-30)	5
Water	65

#### Sample B

Ingredients	Dosage(wt%)
Lauryl glucoside (BP-1200)	30
Lauryl dimethyl amine oxide (LDAO)	5
Water	65

#### Sample C

Ingredients	Dosage(wt%)
Lauryl glucoside (BP-1200)	30
Cocamidopropyl Amine Oxide (CAO-30)	5
Water	65

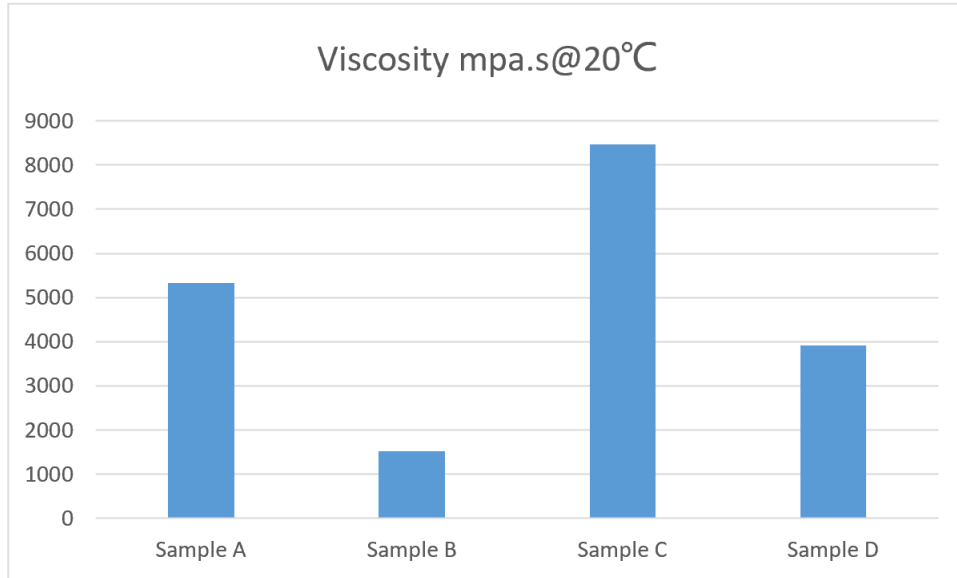
#### Sample D

Ingredients	Dosage(wt%)
Lauryl glucoside (BP-1200)	30
Cocamidopropyl Betaine (CAPB-30)	5
Water	65

Adjust the pH with citric acid to 6.5-7.5, incubated in thermostank at 20°C for 24 hours. Then test the viscosity, under Brookfield, LV #2, RV 3.

The viscosity is as follows:

	Sample A	Sample B	Sample C	Sample D
Viscosity mpa.s@20°C	5330	1520	8470	3910



The conclusion is clear that CAO-30 has the best synergistic thickening property in this recipe.