

PRODUCT DATA

Thickmate™ A

Sep 2016

Trade Name: Thickmate™ A**Chemical Name:** Mild Surfactants**Typical Properties:**

Appearance (25 °C)	Slight yellowish to amber, clear to slight turbid liquid*
Odor	Slight characteristic odor
pH (As is, 25 °C)	7.0 - 9.0
Color (Gardner)	8 Max.
Solids (%)	47.0 - 51.0
Viscosity (As is, 20~25 °C, mPa.s)	3, 500 Max.

* May solidify in cold weather, but shall resume upon gentle heating at above 40 degrees Celsius. This is normal and shall not affect its use.

Introduction:

Thickmate™ A—— Thickening Companion & Co-Surfactant for Glutamate Surfactants.

Features & Characteristics:

- PEG-free, EO & PO-free, Polymer-free, Sulfate-free Surfactant Blends;
- Capable of self-thickening with adjustment of pH within 4.8-5.8;
- Cold Process Capable;
- No polymer thickener needed, but may work synergistically if desired;

This information is believed to be accurate and is intended for general guidance. It should not be construed as a guarantee of its suitability for a particular application. Sino Lion USA offers no warranties, either expressed or implied, nor is freedom from any patent owned by Sino Lion USA or others implied; neither is liability accepted for errors or omissions in the information. Typical properties of products are given for guidance only and do not necessarily represent manufacturing specifications.

Directions/Use Guidelines:

- Thickmate™ A can be easily used as a thickening companion and co-surfactant for Glutamate primary surfactant, add other additives and adjust formulation pH within 4.8-5.8 to obtain various products with desired viscosity and excellent performance.
- Viscosity Range (cPs @ RT): 3,000~24,000**

** The viscosity of the formulation with Thickmate™ A may decrease significantly and the appearance turn opaque at 0-5 °C in cold weather, but will resume upon return to room temperature. This phenomenon is normal and will not affect its use.

Applications: Sulfate-Free Body Wash, Hair Shampoo, Facial Cleansers, Hand Cleansers, Baby Head-to-Toe Cleanser, Feminine Wash, Dish Detergent, Carpet Cleaners; Home Cleaners; Diary Cleaners, DIY (Do It Yourself) products; Spa/Salon Products; all cleansing products.

FORMULA Example #1:

Self-thickening Glutamate Conditioning Shampoo
 (US-HS16030203-Thickmate A)

	Ingredient	%W/W	Supplier/INCI Name	Function
A	Deionized Water	To 100		
	Eversoft™ UCS-50SG	24.0	Sino Lion / Disodium Cocoyl Glutamate	Primary surfactant
	Everlipid™ EFA	0.5	Sino Lion / Linoleamidopropyl PG-Dimonium Chloride Phosphate	Mild Emollient
	Eversmooth™ LC-HC01	1.0	Sino Lion / Behenamidopropyl Dimethylamine & Stearamidopropyl Dimethylamine & Cetearyl Alcohol	Conditioner
	Everquat™ 22P	0.5	Sino Lion / Beheamidopropyl PG-Dimonium Chloride Phosphate	Conditioner
	Glycol Distearate	1.5		Pearling Agent
B	ThickMate™ A	18.0	Sino Lion / Mild Surfactant	Thickener, Co-surfactant
C	Citric Acid (50%)	q.s		pH Adjuster

This information is believed to be accurate and is intended for general guidance. It should not be construed as a guarantee of its suitability for a particular application. Sino Lion USA offers no warranties, either expressed or implied, nor is freedom from any patent owned by Sino Lion USA or others implied; neither is liability accepted for errors or omissions in the information. Typical properties of products are given for guidance only and do not necessarily represent manufacturing specifications.

Procedure

1. Mix phase A under agitation until uniform;
2. Cool to room temperature under agitation, add phase B and mix until uniform;
3. Add phase C gradually with agitation until the formula becomes visually thick, measure pH and viscosity when the desired viscosity is reached. Record the value of pH and viscosity;

Properties

Appearance: Slight Yellow Pearlescent Fluid
Viscosity: 10,000-13,000 cP (25°C, Brookfield DV2T, 20rpm, spindle#3/4/5)
pH: 5.03-5.15

Use Level: 10 - 22 %.

Storage: Sealed and stored in a dry, cool place.

Package: 20~25MT/ISO TANK, 1000KG/IBC DRUM, 200KG/DRUM.

Retest date: 24 months from manufacturing date (Tentative).