



Ultra Gentle Baby Shampoo

Superior thickening efficacy over commercial thickeners in APG system

Ultra Gentle Baby Shampoo is as gentle and mild to the eyes as pure water. Perfect for baby's first bath (free of added common allergens and irritants), this baby shampoo cleanses gently and rinses easily, leaving your baby's hair soft, shiny, manageable and clean while smelling baby-fresh.

SorbiThix L-100's powerful multi-surfactant thickening ability can give you freedom to thicken your baby shampoos, even without any anionic surfactant in the formulations, when remaining the same clarity, and viscosity.

	INCI Name, (Trade Name)	Wt%	Functions
1	Distilled Water	To 100	Liquid carrier
2	Disodium EDTA	0.10	Stabilizer
3	Guar Hydroxypropyltrimonium Chloride(Jaguar Excel)	0.10	Naturally derived hair conditioner
4	Glycerin	1.00	Humectant
5	Decyl Glucoside (50% active)	8.0	Non-ionic surfactant
6	Coco-Glucoside (50% active)	10.0	Non-ionic surfactant
7	Lauryl Glucoside (50% active)	8.0	Non-ionic surfactant
8	Cocamidopropyl hydroxysultaine (42% active)	10.0	Amphoteric surfactant
9	SorbiThix L-100	3.20	Non-ionic associate thickener
10	Perfume oil (Creative 8661)	0.50	Perfume
11	Symsave H + Euxyl 9010 (1:1 bend)	0.60	<i>Symsave H from Symrise, Inc.</i>
12	Citric acid to pH 6	q.s.	
Feature: Viscosity at 22C, 12,000 cP. Clear mild baby shampoo with pleasant scent. pH 6			

SORBITHIX L-100™

INCI: Sorbeth-230 Teteroleate (and) Decyl glucoside (and) Sorbitan Laurate.

- A patent-pending, user-friendly, **versatile** liquid non-ionic associative thickener with unique six arm molecular structure. It is the best in its class of non-ionic associative thickeners for **thickening** every single surfactant system in the market, including the AOS and the very mild amino acid-based **glutamate surfactants**.
- Rich and pleasant flowing sensory, and **no negative impact on foaming**
- Easy-to-use in manufacturing and in formulation
- Synergy in thickening with salt and common hydrophobic thickeners
- Compatible with cationic, anionic, and non-ionic surfactants and polymers
- Mild and non-irritating to skin and eyes

Applications: All personal cleansing products - shampoo, body wash, foam bath, facial cleanser, hand cleanser, liquid soaps, detergent gel, etc.

Formulation and manufacturing tips:

- Suitable for pH 4.5 - 7
- 0.5 – 5 % dosage. Add at any stage of processing before temperature cools down below 35C, and mix until dissolved completely.
- **Rescuing Production Batches** - there are two specific methods for boosting viscosity in batches that fail to meet specifications:

Method 1:

A) Mix in a pail or drum the SorbiThix L-100 with a decyl glucoside APG surfactant at 1:1 ratio at 40-45 C for 10-20 minutes until solution is clear.

B) Add this blend into the tank and mix at 25 C and above. The actual mixing time required depends on the size of tank, mixing equipments, and the temperature. At 25 C, it may take about 30 minutes. At 30 -35 C, it takes much less time.

Method 2:

If you can warm the batch up to about 35C, you can add SorbiThix L-100 directly into the tank, and mix to the right viscosity. The amount of time it takes to dissolve the SorbiThix L-100 into the shampoo or shower gel depends on the tank geometry, size, and mixing equipments. That said, internal lab testing has shown that it can take as little as 5 minutes.

** dissolution rate depends greatly on temperature.