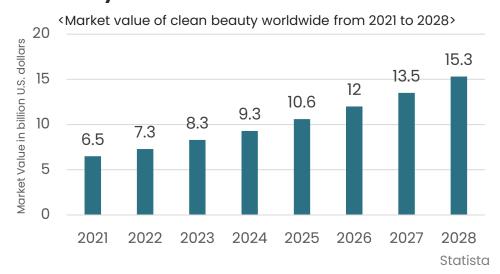


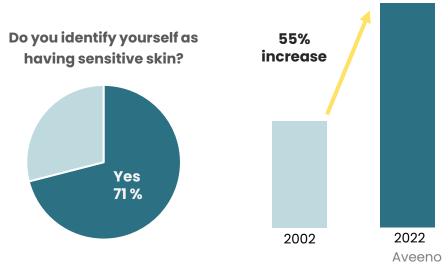
Latest Market Trend

- Recently, the topics of 'Clean Beauty' and 'Sensitive skin care' have gained prominence.
- In the **Clean Beauty** trend, many products are seen to simplify ingredient usage and exclude various ingredients. According to data from Statista, the **Clean Beauty** market is predicted to continue growing until **2028**.
- According to a report released by Aveeno in 2022, 71% of adults self-identified as having sensitive skin, marking a 55% increase in just 20 years. Mintel data also indicates that the demand for products designed for sensitive skin has increased over the past five years. Additionally, the sensitive skincare market is growing in China, and as of 2023, products tailored for sensitive skin are most widely used in North America and Europe.

Clean Beauty



Sensitive & dry skin Care





"Free-From" At The Forefront

Clean beauty began with a consumer focus on products that were free from harmful ingredients. NielsenIQ defines truly clean beauty products as those that are free from all the following: parabens, sulfates, phthalates, artificial colors and fragrances, plus 600 other ingredients. These clean products have reached over \$400 million in sales and show even higher growth rates compared to the total category (+8.1% vs +2.0%).

Free-from drives growth

Total beauty and personal care \$42.1B		
Free from paraben \$23.4B	+ 3.6%	
Free from paraben + sulfates \$15.8B	+ 5.0%	
Free from paraben + sulfates + phthalates \$5.4B	+ 13.0%	
NielsenIQ clean \$406MM	+8.1%	



Related Scalp Care Product Innovations



Head and shoulders sub zero sensation anti-dandruff shampoo



Dove hydrogel treatment mask



Nexxus invigorating detox scalp scrub



The Significance of Mild Surfactants

Sulfates and Its Negative Impact

- Essential and natural lipids stripped from skin/ scalp which breaks barrier integrity and increases Transepidermal Water Loss (TEWL)
- Unpleasant sensory properties, dry after feel.
- · Hair is more prone to breakage.
- Sulfate absorption and accumulation can cause skin irritation/inflammation





Surfactants for Sensitive Skin: The Gentle Approach*

The 'mildness' of surfactants on the skin and hair is of paramount importance due to their high frequency of use.

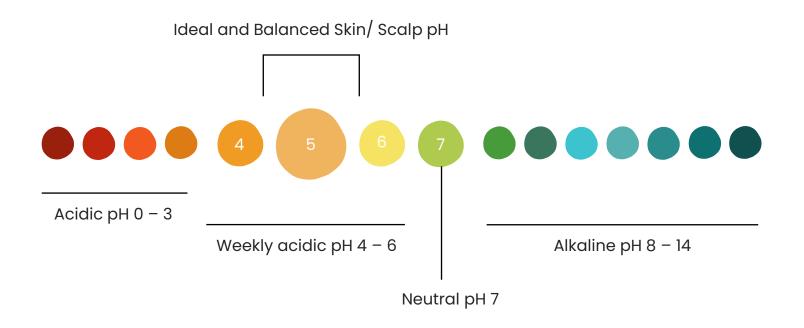
Surfactants should have as little impact as possible on the skin's functional and structural integrity.

Harsh soaps are known to be irritating, cause dryness or tightness and cause damage to both protein and lipid regions of the Stratum Corneum after multiple washes. Damage resulted on the Stratum Corneum also contributes to high Transepidermal Water Loss (TEWL).



The Significance of Mild Surfactants

Skin and Scalp pH Scale



GENTLE CLEANSING

pH 5.0 – 5.5

EASILY ACHIEVE WASHES OF PH 5.0 - 5.5 WITH SUPERSURF AMIX 40





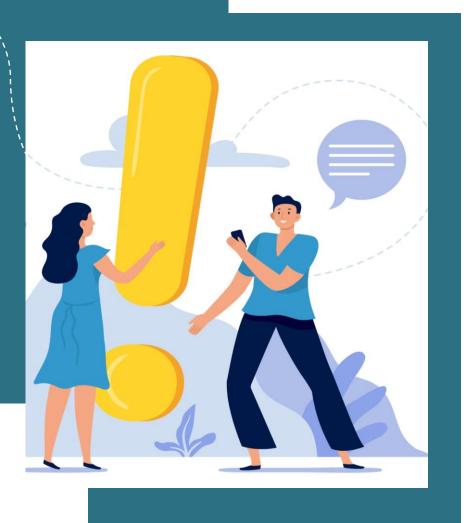
Challenges of Using Amino Acid Surfactants

Poor transparency, haziness of formulation at low pH ~5

2 Difficult to control viscosity, fail to achieve high viscosity

Poor foaming, foam is significantly reduced at low pH ~5





Our solution SUPERSURF AMIX 40

Fast and Easy Formulation at Low pH

Good Foaming, Transparency, and Viscosity

3 Suitable for Gentle Mild Wash at Low pH



SUPERSURF AMIX 40

The Perfect Blend





Performance

- Dense and creamy foam
- Clean yet gentle
- Excellent conditioning, soft skin feel after wash



Safety

- Mild
- Sulfate-free
- EWG green
- Safe



Usage

- Fast, fuzz-free application
- Cold-processable
- Easy thickening of AAS with good viscosity & transparency
- Achieve mild wash of pH 5 5.5



SUPERSURF AMIX 40

Composition and Specification

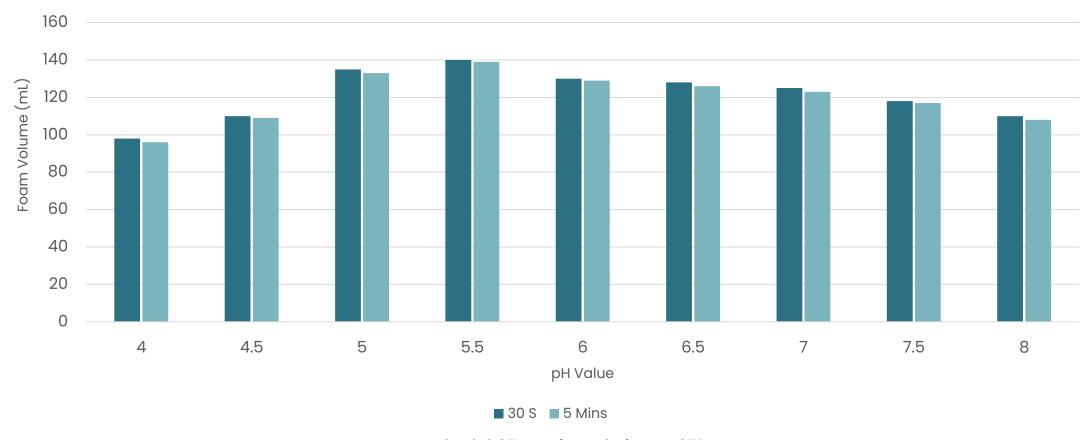
TYPE	Composition
ANIONIC SURFACTANT	SODIUM METHYL COCOYL TAURATE
	SODIUM COCOYL ALANINATE
AMPHOTERIC SURFACTANT	COCAMIDOPROPYL HYDROXYSULTAINE

SPECIFICATIONS	STANDARD INDICATORS
APPEARANCE, 25°C	YELLOWISH VISCOUS LIQUID
ODOUR	SLIGHT CHARACTERISTIC ODOUR
PH VALUE (AS IS, 25°C)	8.0 - 10.0
TOTAL SOLID CONTENT, %	≥ 35.0
VISCOSITY (SPINDLE 3, 30 RPM, 25°C), CPS	> 2000



FOAM VOLUME

Foam Volume of Supersurf AMIX 40



Test method: 0.25% active solution, at 25°C.



TRANSPARENCY

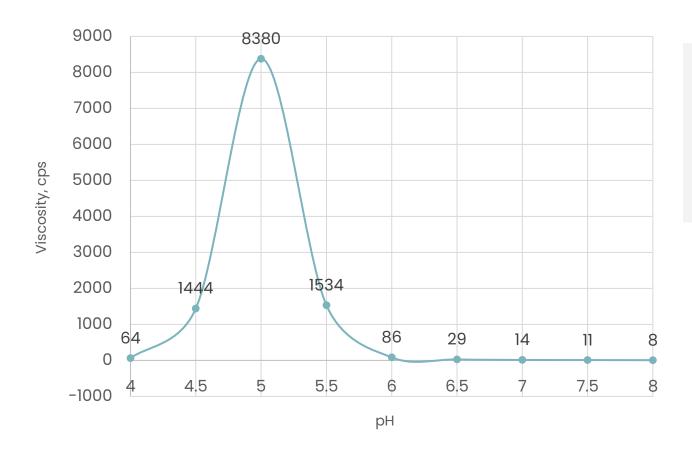
Good transparency in formulations

	50: 50	40:60
Composition	Supersurf AMIX 40 (50%) Water (50%)	Supersurf AMIX 40 (40%) Water (60%)
Condition	рН 5	рН 5
Viscosity	Spindle 4, 60 rpm, 25°C: 8380 cps	Spindle 4, 60 rpm, 25°C: 5890 cps
Transparency	(D) ECOORIIS	(D) ECOORIIS



VISCOSITY

Viscosity-pH Curve



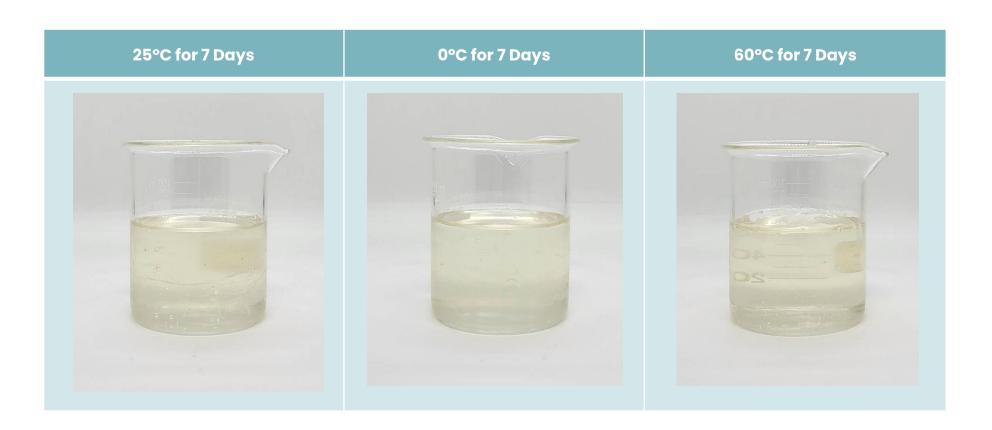
Test Method

- Formulation: 50% Supersurf AMIX 40 + 50% water
- Reducing pH by adding pH adjuster, citric acid.



STABILITY

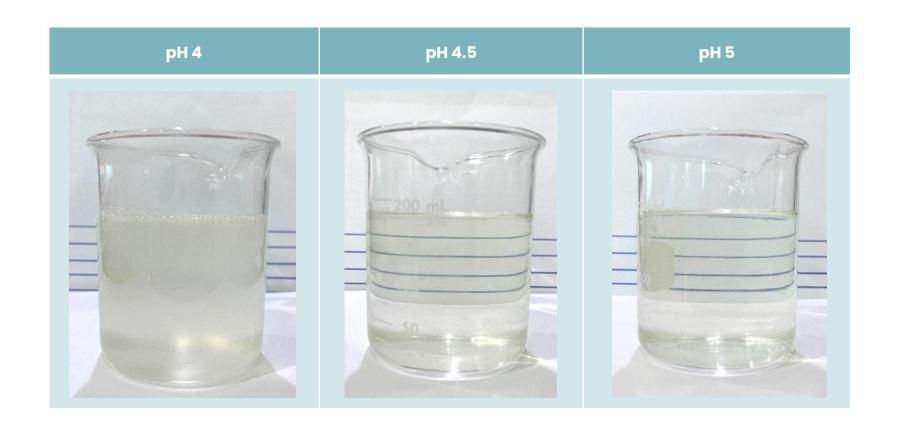
Stability of Supersurf AMIX 40 at high and low temperatures





STABILITY

Stability of 50% Supersurf AMIX 40 solution at different pH





PANEL TESTING

Appearance and Performance

50% Supersurf AMIX 40 formulation. Results from 20 people of age 20-40.

SUPERSURF AMIX 40 SLES + CAB Ease of rinsing Flowability Detergency Conditioning **Foam Volume** Foam Quality



PANEL TESTING

Sensory

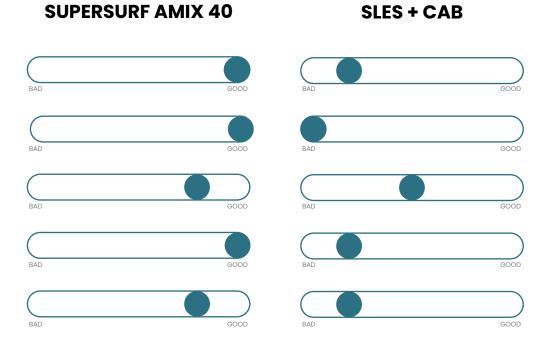
Skin Soft After Feel

Residue/ Stickiness

Comfort

Hair Moisturized After Feel

Ease of Combability





USE GUIDE

Fuzz-free formula for various applications

30 - 40%

Recommended Dosage for **Body Wash**



Recommended Dosage for **Hair Wash**





Simple Dilution

Add desired concentration of Supersurf AMIX 40 based on application to water.

2 Ingredients Addition

Add desired active ingredients or conditioners to blend. Then, add fragrance and preservative.

3 pH Adjustment

Using Citric Acid, lower the pH of the blend.





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