

SEPPIC

PROTEOL™ APL EF

Cleansing Solution
Inspired by Nature



Ingredients that inspire

Inspired by nature & outstanding for its gentle approach

▶ **PROTEOL™ APL EF**
is an anionic surfactant
obtained by acylation of
amino acids characteristic
of apple juice

▶ **PROTEOL™ APL EF**
adds extra mildness
to all foaming formulas!

▶ **Solubility**
- from pH 5.5 alone in water
- improved in combination
with other surfactants

▶ **Doesn't contain neither
EDTA nor preservative
and no sulfate**

▶ **Dry extract 29-34%**

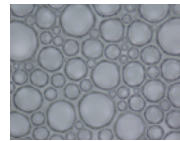
▶ **INCI name**
Sodium Cocoyl Apple
Amino Acids

▶ Mildness touch of Beauty

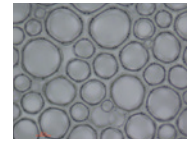
Stability & foaming power by excellence

PROTEOL™ APL EF
develops a dense foam,
due to the formation of
fine and compact bubbles.

T=0



After 30 minutes

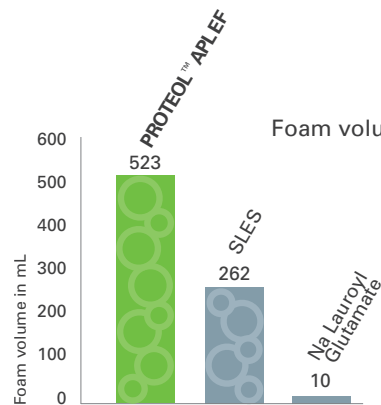


X100

Protocol

- Foam expansion
- Inward-flow turbine
3000 rpm for 2 min
- Solution at 1% a.m.
in hard water
- 40°C

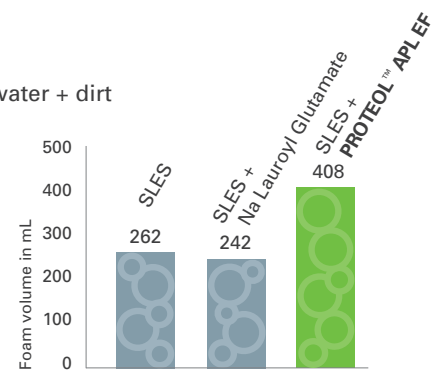
More foam than classical surfactant



Protocol

- Ross-Miles Tes (ISO 696-1975)
- 1% a.m.
- pH 7

Excellent foam booster



Protocol

- Ross-Miles Tes (ISO 696-1975)
- NaLES (9/10) / cosurfactant (1/10)
- 1% a.m.
- pH 7

▶ Respectful of the environment

- Biodegradability: 95% (28 days) 77% (10 day-window)
- Aquatic toxicity on Daphnia: EC50 (48h): 45mg/L
- Aquatic toxicity on algae: EC50 (72h): 76mg/L
- Aquatic toxicity on fish: LC50 (96h) > 100mg/L
- Suitable for EU Ecolabel formulations
- NO EDTA



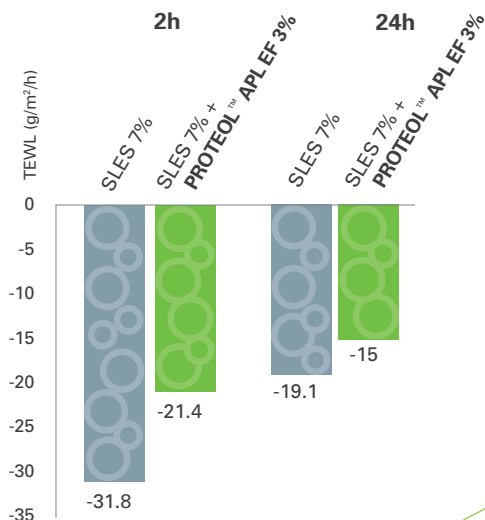
▶ A well protected skin

Barrier effect

PROTEOL™ APL EF reduces the negative impact of SLES on the skin barrier function (TEWL) & dryness. It helps maintaining the skin integrity.

Protocol

- Application of an occlusive patch for 48h on 16 volunteers
- Tested concentrations: SLES at 7% a.m.
SLES + PROTEOL™ APL EF (7%/3% a.m.)
- TEWL measurement at 2h and 24h after removing the patch
- Measured TEWL between a 48h treated area with occlusive patch and a non treated area



Mucosa tolerance

PROTEOL™ APL EF demonstrates good vaginal tolerance
Non irritant at 10% of PROTEOL™ APL EF for rinse-off applications



HVE, *in vitro* reconstructed vaginal epithelium

Tested on vaginal reconstructed human epithelium "SkinEthic model" (Application on epithelial tissue cultures for 10 min, 1h, 3h and 24h, cytotoxicity assessed by MTT measurement)

PROTEOL™ APL EF boosts and expands the foam to the skin's delight!

▶ Inspiration Formulations

Ideal for a pleasurable sensation for all skins!

Dense, abundant, gentle foam

+

Excellent tolerance

Wipes

Hand washes

Make up-remover

Gentle shampoo

Intimate hygiene

Foaming emulsion

Fragrance free formulas

Foaming face-wash gel

Cleansing transparent gel

Shower gel for sensitive skin

▶ PROTEOL™ APL EF optimizes foaming formulations

Sulfate free
composition with
optimized ratio for
a cleanser with 5%
of active matter

4.5% PROTEOL™ APL EF
2% ORAMIX™ CG110
7% ORAMIX™ GB 10

More dense foam

Higher amount of foam

Fragrance free
& transparent formulas

▶ Optimized Foaming Power Make it cleanser! EU07384A

A	ORAMIX™ CG 110	2.00%
	Parfum/Fragrance	0.15%
B	PROTEOL™ APL EF	4.50%
	ORAMIX™ GB 10	7.00%
	Benzyl Alcohol & Benzoic Acid & Dehydroacetic Acid & Tocopherol	1.00%
C	Aqua/Water	Up to 100%
	AQUAXYL™	1.50%
	BLUE SEAKALE HC	1.00%

▶ Equilibrium Daily Intimate Wash pH 5.5 - AS40054A

Transparent Gel

A	Aqua/water	Up to 100%
	Xanthan Gum	0.20%
B	Chelating Agent	0.10%
	Glycerin	2.00%
	AMONYL™ 380BA	10.00%
	PROTEOL™ APL EF	5.00%
	ORAMIX™ L 30	5.00%
	FLUIDIPURE™ 8G	3.00%
	Preservative	0.60%
	GELALG™	3.00%
	Parfum/Fragrance	0.15%
	Citric Acid (25%)	Up to pH

Nota:

The analytical specifications warranted are only those mentioned on the certificate of analysis supplied with each delivery of the product.

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Air Liquide Healthcare is a world leader in medical gases, home healthcare, hygiene products and healthcare specialty ingredients. It aims to provide customers in the continuum of care from hospital to home with medical products, specialty ingredients and services that contribute to protecting vulnerable lives.

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