

BioReNuva

Cosmetic and Home Care Ingredients

Leveraging biotechnology to develop better performing, cleaner and more sustainable ingredients.



Mild Cleansing Platform - BioSurfactants

Non-GMO • No Organic Solvents • Cosmos • Vegan

Sophorolipid ReNuva™ SL-A70

INCI: Glycolipids

Recommend Usage Level

Primary (10-20%), Secondary (2-10%)

- Sugar and Vegetable Oil as Raws
- Industry Best Water Soluble Cleanser (CMC)
- Clinically Proven to Moisturize Skin
- Contains 30% Lactone to Reduce Acne
- 100% Biodegradable
- Amphoteric Properties
- HLB 16-18
- Moderate Foam

Sophorolipid ReNuva™ SL-L70

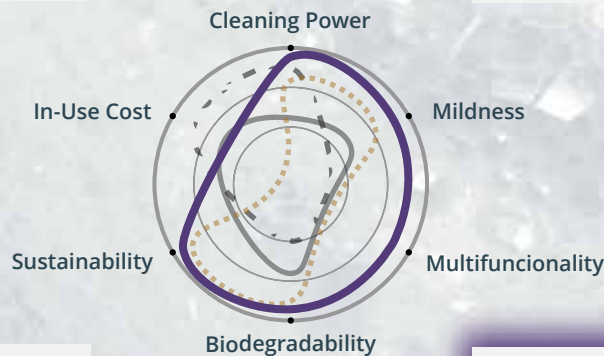
INCI: Glycolipids

Recommend Usage Level

Primary (10-20%), Secondary (2-10%)

- Sugar and Vegetable Oil as Raws
- Industry Best Oil Miscible Cleanser (CMC)
- Clinically Proven to Moisturize Skin
- Contains 70% Lactones to Reduce Acne
- 100% Biodegradable
- Acts as Self-Emulsifier in Select Oils Systems
- HLB 6-8
- Low Foam

A Comparison of Cleanser Types



NEW

Rhamnolipid ReNuva™ RL-50

INCI: Glycolipids

Recommend Usage Level

Primary (5-10%), Secondary (1-5%)

- Sugar and Vegetable Oil as Raws
- Industry Best Cleanser (CMC)
- Very High Surface Activity
- Effective Solubilizer (Compared to HCO-40)
- 100% Biodegradable
- HLB 8-10
- Moderate-High Foam

ReNuva Glycolipids

Traditional
Chemical Surfactants

Bio-Based
Chemical Surfactants

Amino Acid
Surfactants

Sophorolipid, Rhamnolipid + High Foamers

ReNuva™ Ready Blend

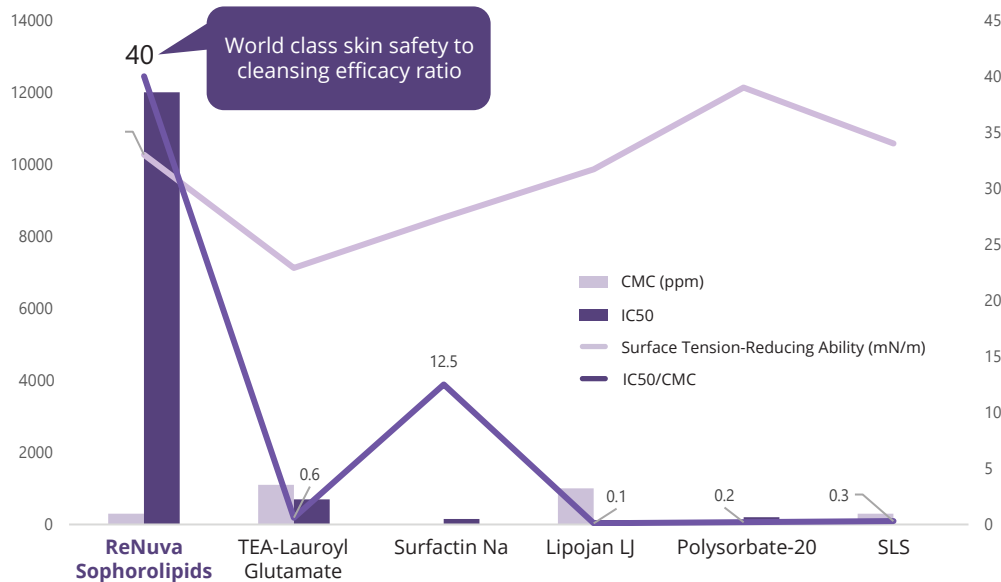
INCI: Glycolipids, Cocamidopropyl Hydroxysultaine, Sodium Methyl Cocoyl Taurate, Sodium chloride

Recommend Usage Level

(10-25%)

- Sugar and Vegetable Oil as Raws (EWG =1)
- Rich, Sustained Lathered Foam
- Conditions Hair and Delivers Color Stay
- Outperforms Industry Benchmark
- 100% Biodegradable
- HLB 14-18
- Economical Option

Calculated Cleansing (CMC) & Mildness (IC50)



Clinical Cleansing Examination

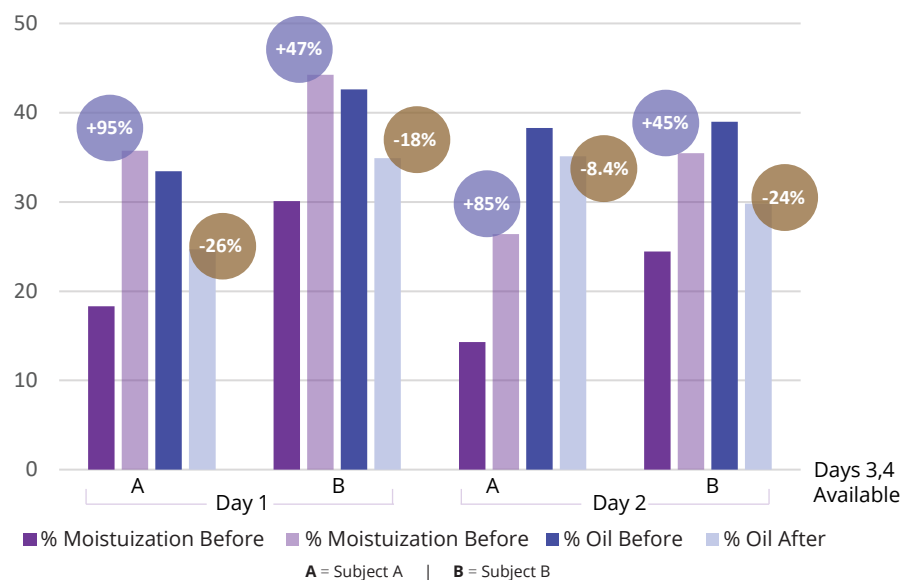


Test Method

- (i) L'Oreal Waterproof Mascara and (ii) YSL Non-Waterproof Lipstick applied to skin and allowed 15 minutes to dry.
- Cotton Pads were dipped and allowed to soak up 5 grams of material:

(i)	(ii)
A. Neutrogena Make-Up Remover (NMUR)	A. Neutrogena Make-Up Remover (NMUR)
B. NMUR + 10% ReNuva Sophorolipids	B. 10% ReNuva Sophorolipids
C. 10% ReNuva Sophorolipids	
- Mascara and Lipstick wiped with pads and performance was measured visually.

Moisturization & Oil % Effect



Acne (Anti-Bacterial Effect)

Acne Study Outline

Age 18 - 70
Skin Acne Prone
Duration 4 Weeks
Schedule 0 & 4 Wks
Calculation Mean Pixels

*30% Acid/70% Lactone (ReNuva SL-L70)

99.93% Spot Reduction



Baseline 4 Weeks



63.22% Reduction