



1 *Lupin protein care foam*
developed by Fraunhofer UMSICHT.

2 © John Raetz/www.pixelio.de.

LUPIN PROTEIN CARE FOAM

AN EXAMPLE OF A HIGH OIL CONTENT DELIVERY SYSTEM FOR APPLICATION ON SKIN

Fraunhofer Institute for Environmental, Safety, and Energy Technology UMSICHT

Osterfelder Strasse 3
46047 Oberhausen, Germany

Dr. rer. nat. Sebastian Pfeifer

Chemicals and Formulations
Phone +49 208 8598-1103
sebastian.pfeifer@umsicht.fraunhofer.de

Dr. rer. nat. Stefano Bruzzano

Deputy Head of Department
Biorefinery and Biofuels
Phone +49 208 8598-1167
stefano.bruzzano@umsicht.fraunhofer.de

www.umsicht.fraunhofer.de

Fraunhofer UMSICHT and its partners¹ have developed a lupin protein care foam from renewable, non-petrochemical sources, which

- is rich in lipids (20%) without fatty feeling
- features fast absorption into the skin
- shows no abrasion during usage
- is vegan.

The lupin protein isolate E involves good emulsifying properties and supports the stabilization of the emulsion based of

- water
- sunflower oil
- lupin protein
- xanthan gum
- and alkyl polyglucoside.

The simple composition leads to a consumer-friendly foam with good care properties. Fraunhofer UMSICHT provides with its expertise the development of a product of its own.

Keywords

- sustainable raw materials
- lipophilic foam
- consumer friendly formulation
- IP of Fraunhofer UMSICHT
- Know-how and support in licensing

Industrial Sectors

- cosmetic industry
- personal and home care
- medical care



1 © Petra Bork/www.pixelio.de

Technological specification

The fundamental formulation consists of

- water
- vegetable oil
- protein
- poly-sugars (viscomodifier)
- preservative
- foam booster¹
- propellant (lipophilic).

The basic formulation consists of 20 % oil. There is no abrasion residue after usage. The oil and proteine could be varied, haptic modifier could be added to change the formulation properties to meet the customer needs.

Our service

Fraunhofer UMSICHT and its partners support the development of own innovative products, for instance

- body mousse
- care for atopic skin
- shaving foam
- sun protection
- oil foam (shower)
- hair care
- animal cosmetics.

Moreover, Fraunhofer UMSICHT holds IP in this field and is able to give professional support in licensing.

Your benefit

A skin friendly formulation by renunciation of ingredients from petro-chemical raw materials.

Due to ist excellent absorption behaviour, the foam is suitable to transport your active agent of choice into the skin.

¹ depending on the specific formulation