

„I Am What I Wear!“

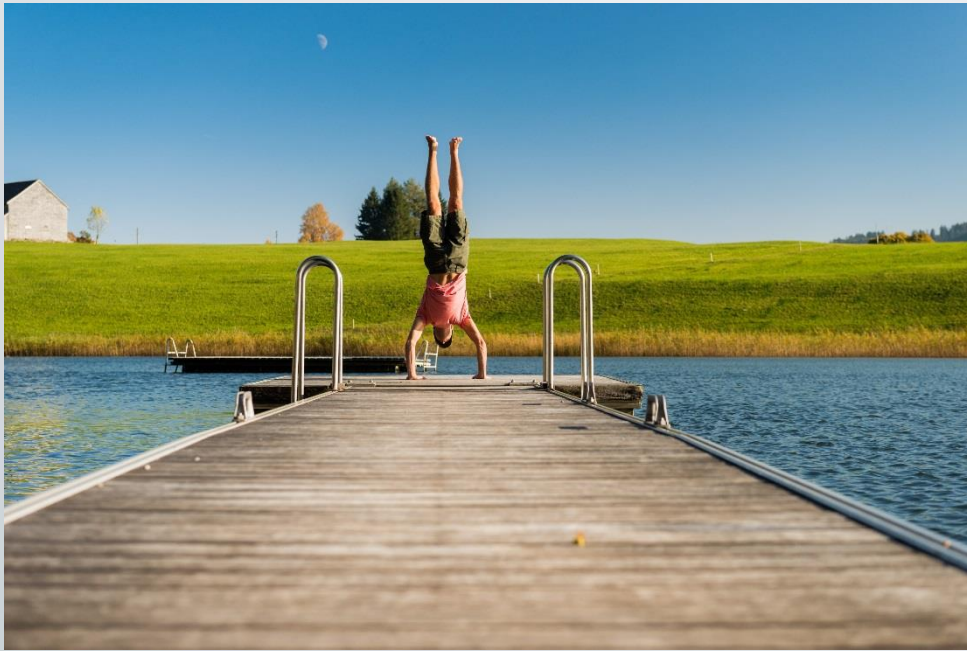
The harmony of body, soul and spirit in regard to trends in textiles and function.

Judith Glück
Schoeller Technologies AG

• ecorepel® • energear™ • iload®

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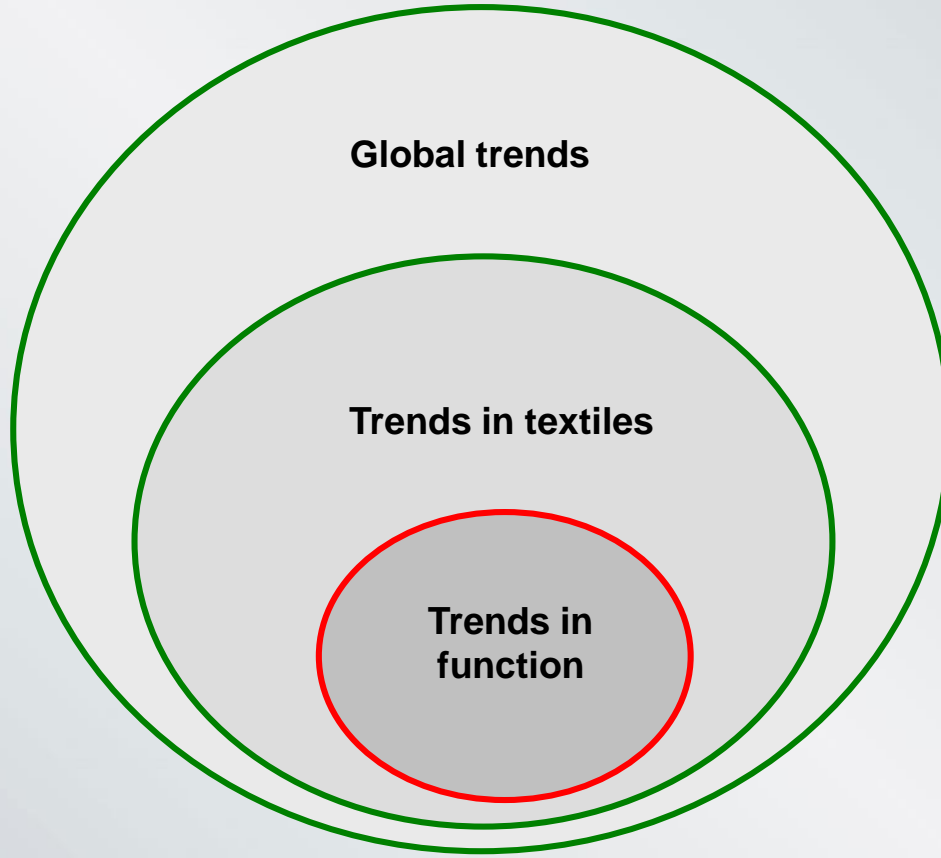


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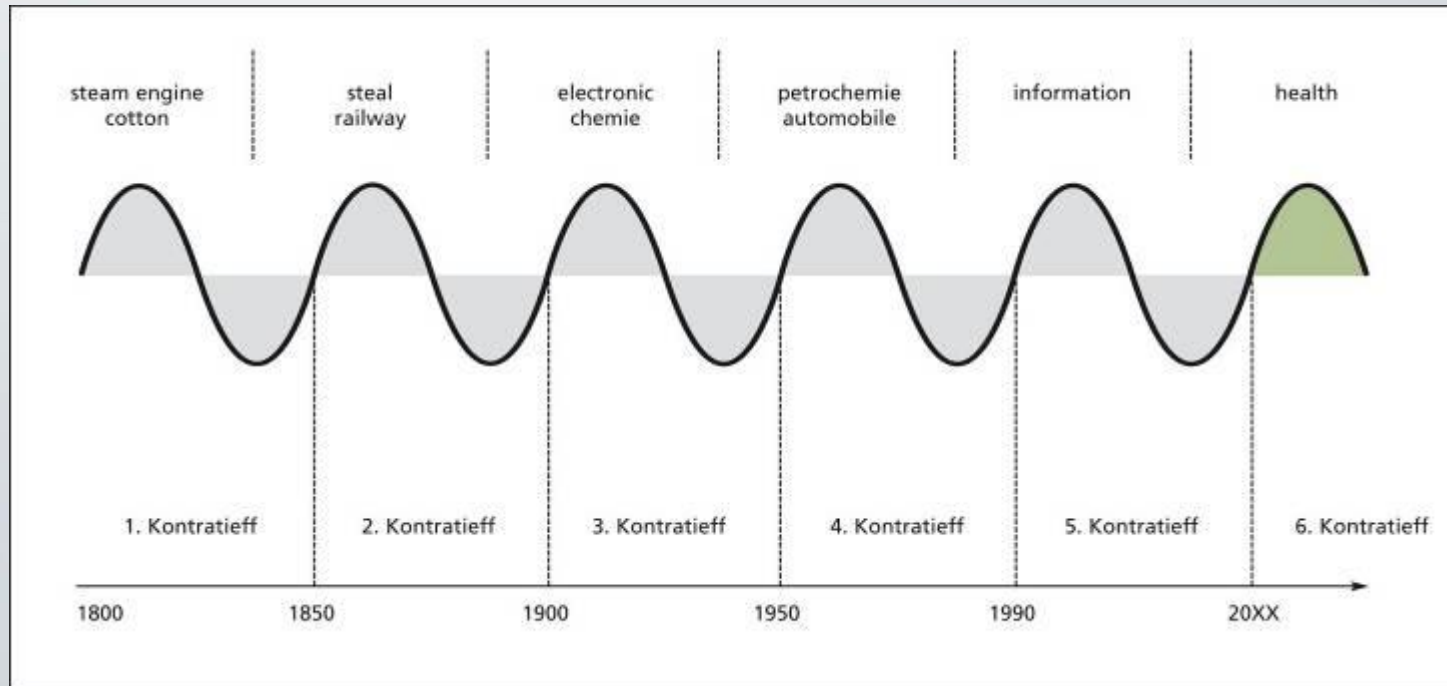
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Megatrend HEALTH

Kontratieff Theory



Megatrend HEALTH

- Trend WELLNESS AND MEDICAL WELLNESS
- Trend HEALTHY SPORTS
- Trend NATURAL LIVING
- Trend NATURAL CLOTHING and COSMETICS

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schoeller[®]

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ecorepel[®] - Clean and dry, naturally.



schoeller[®]

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ecorepel® - Clean and dry, naturally.

Inspired by Nature. Ducks and all water fowl produce an oily secretion that allows their plumage to repel water.



ecorepel® is especially developed on the basis of this natural impregnation water repellent function.

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ecorepel® - Clean and dry, naturally.

Inspired by Nature. Highly functional, odorless high-tech textile finish from Schoeller, offers modern and clean water and mud repellency.



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ecorepel® - Clean and dry, naturally.

Environmentally friendly

- ◆ Free from fluorocarbons
- ◆ Biodegradable
- ◆ bluesign® approved components (greatest possible freedom from harmful substances and greatest resource efficiency)



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ecorepel® - Clean and dry, naturally.

Added value for the consumer

- ◆ Water and mud repellent
- ◆ Wash resistant, easy-care, wrinkle-free
- ◆ Breathable, durable, soft touch

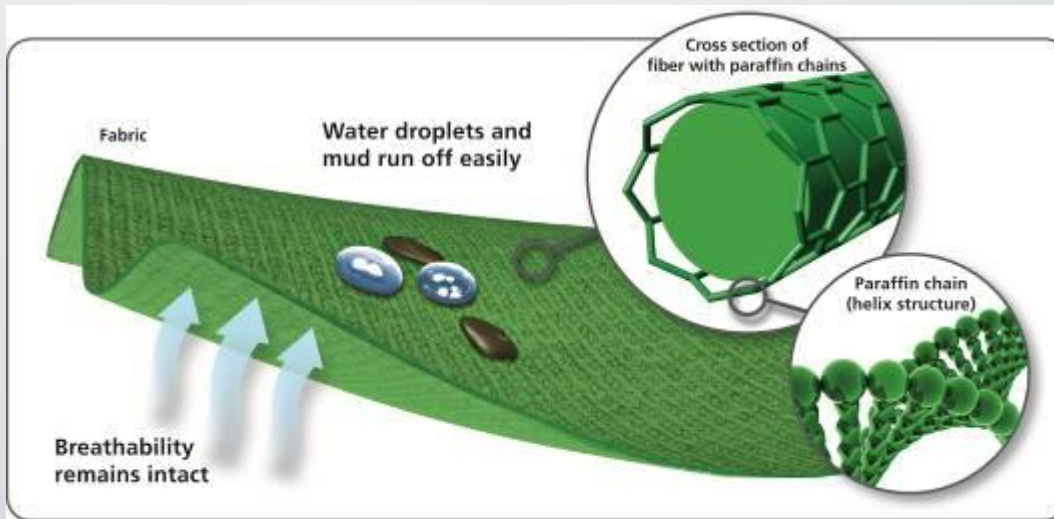
Easy application

- ◆ Application on all kind of fibers



ecorepel® - Clean and dry, naturally.

How does it work?



Paraffin chains wrap themselves as a spiral around the individual fibers, filaments or yarn in a very fine film. This reduces Surface Tension so that water droplets and even mud with significant higher surface tension simply run off.

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ecorepel® - Clean and dry, naturally.

Environmentally friendly.

- ◆ Free of **fluorocarbons**
- ◆ ecorepel® is **biodegradable** (according to OECD 302 B (80–100 %)).
- ◆ Schoeller supports eco certifications such as **bluesign®** and **Oeko-tex®**; ecorepel® complies with these strict guidelines.

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energear[®] - Safe your Energy.



• ecorepel[®] • energearTM • iload[®]



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energear™ - Save Your Energy.

Feel good with energear™.

- ◆ Every living being constantly emits energy in the form of Far Infrared Rays.
- ◆ energear™ ensures that the energy radiated by the body is reflected.
- ◆ This can positively affect the body's energy balance.



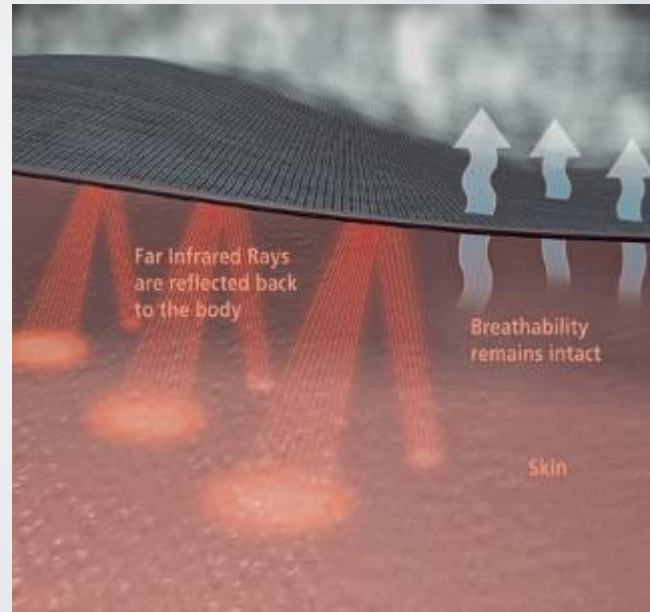
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energear™ - Save Your Energy.

How does it work?

- ◆ Schoeller has developed a special titanium-mineral matrix.
- ◆ energear™ allows the body's own energy to be reflected back to it.



• ecorepel® • energear™ • iload®



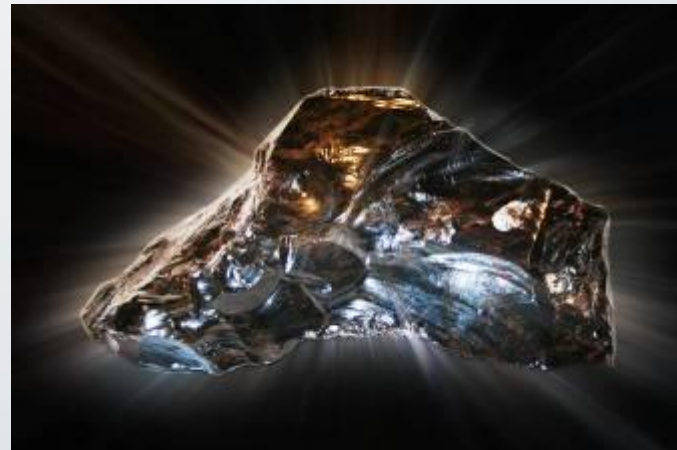
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energear™ - Save Your Energy.

What are Far Infrared Rays?

- ◆ The sun, certain stones, minerals and living beings all radiate FIRs.
- ◆ Far Infrared Rays are a component of Infrared Rays. They can have positive effects on the body's energy balance.
- ◆ Knowledge about FIRs and their benefits based on Asian medicine.
- ◆ FIRs are used in a variety of beneficial applications worldwide.



energear™ - Save Your Energy.

Positive effects on the human body.

- ◆ Increase concentration and general wellbeing
- ◆ Enhance performance and improve balance
- ◆ Prevents premature fatigue and improves regeneration, even when sleeping



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energear™ - Save Your Energy.

The better the clothing, the higher the performance.

- ◆ Clothing systems can influence our mental performance?
- ◆ Hohenstein tested different clothing systems used in complex work areas such as hospitals.
- ◆ Results: Respondents wearing high quality clothing proved capable of greater mental performance than respondents in disposable wear as shown in both their reaction times and error rate.

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energear™ - Save Your Energy.

The bean test.

- ◆ Tested with and without energear™, the growth of beans was observed.
- ◆ After 8 days the beans with energear™ (on the left) have grown faster and in greater numbers than those without energear™.



with energear™/without energear™

iLoad[®] - the reloadable drug delivery system.



schoeller[®]

• ecorepel[®] • energear[™] • iload[®]



iLoad® - the reloadable drug delivery system.

State of the Art.

- ◆ Reloadable drug delivery system
- ◆ Permanent
- ◆ Individually adaptable

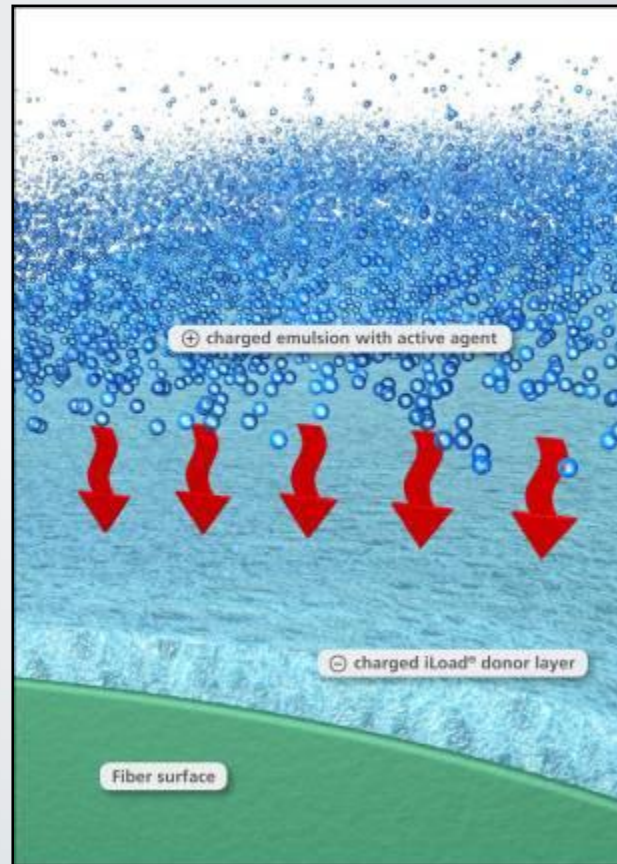
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iLoad® - the reloadable drug delivery system.

How does it work?

→ **Sorption:** Loading with active agent



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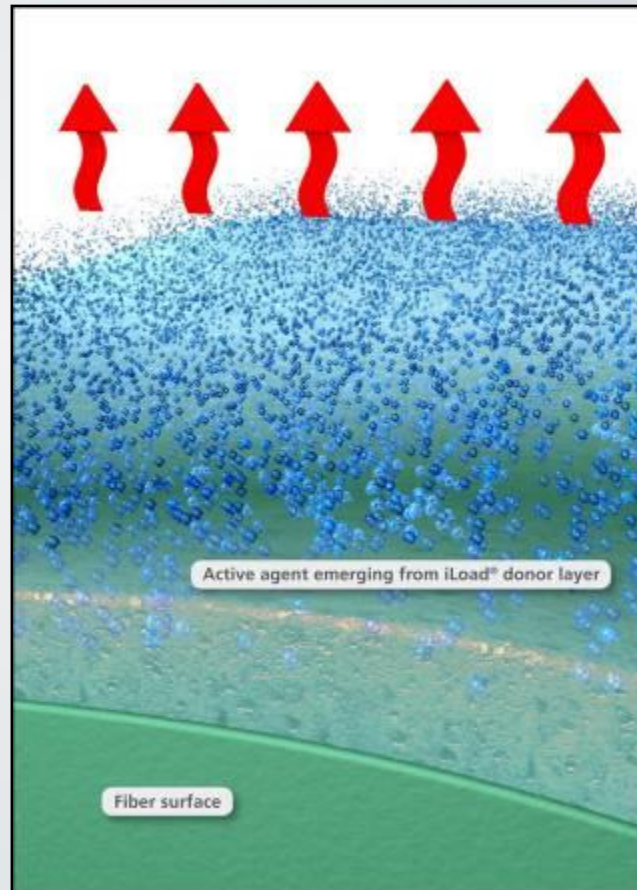
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iLoad® - the reloadable drug delivery system.

How does it work?

→ **Desorption:** Discharging active agent



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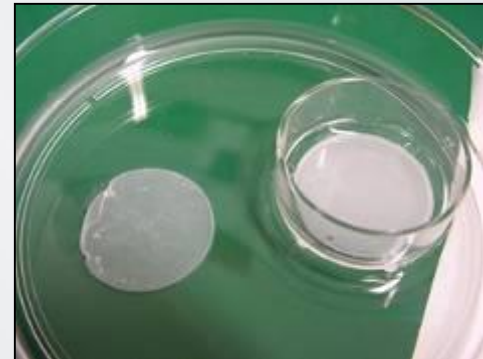
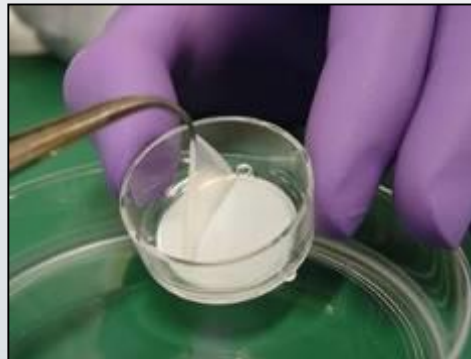
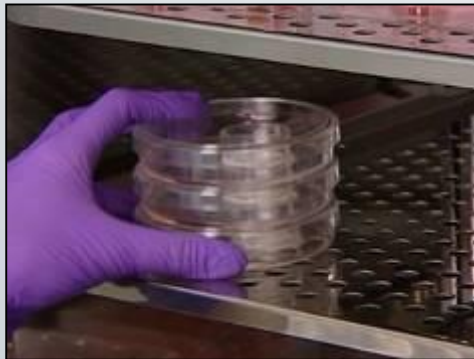
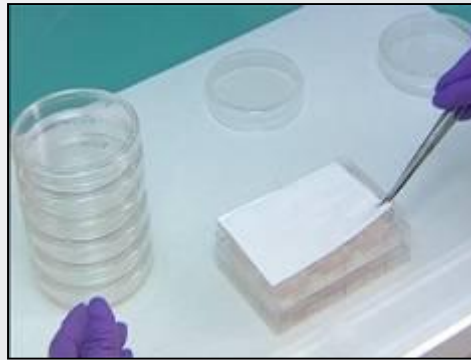


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iLoad® - the reloadable drug delivery system.

In vitro skin model - Skin-Kit with Reconstructed Human Epidermis (RHE)



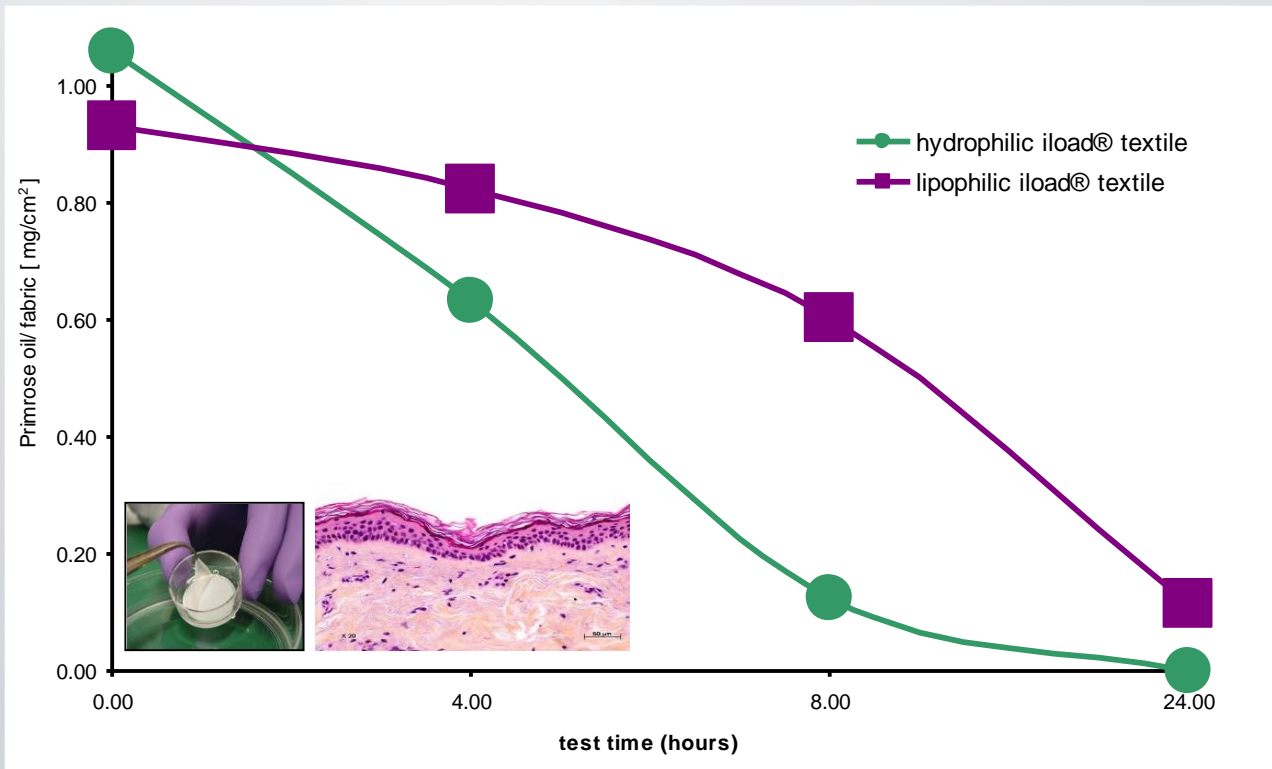
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L'Oréal Recherche, by courtesy of SkinEthic®



iLoad® - the reloadable drug delivery system.

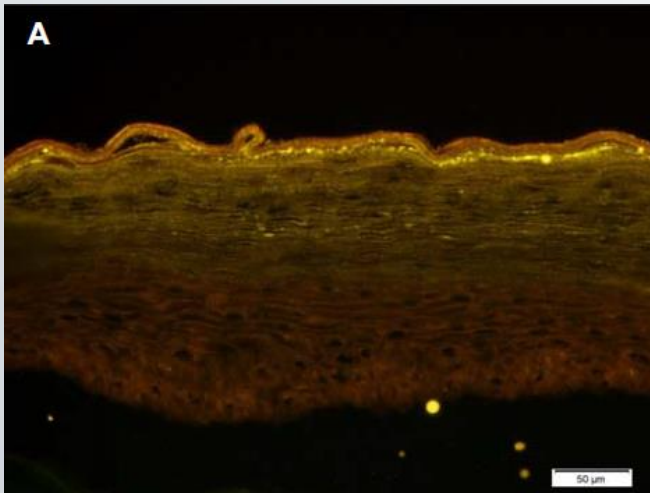
Desorption trial (in vitro skin model) contact pressure 1kPa



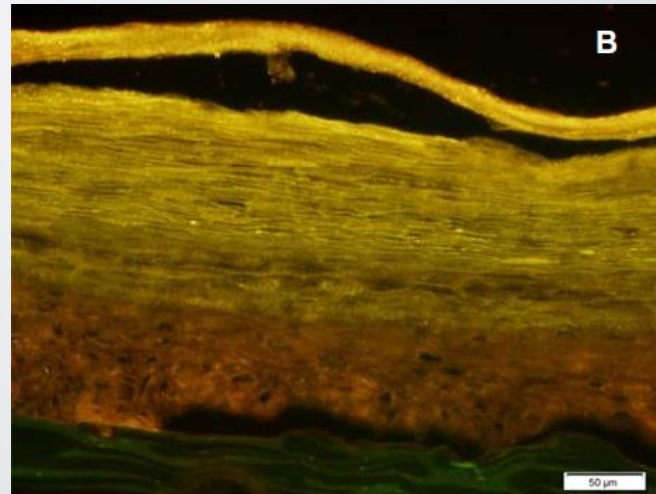
iLoad® - the reloadable drug delivery system.

Human skin model, contact pressure 1 kPa / 4 hours

Unloaded iLoad® textile
No evening primrose



Loaded iLoad® textile
Penetration of evening primrose oil into epidermis visible



Schoeller Technologies AG

- ◆ Active licensing company since 2000
- ◆ Subsidiary of Schoeller Textil AG
- ◆ Based Sevelen, Switzerland
- ◆ Core competence: successful development and marketing of new, cutting edge textile technologies that are made available to production partners in the form of patents and trademarks.
- ◆ Focus on R&D innovation
- ◆ Branding as a distinguishing feature of quality
- ◆ Schoeller Technologies have received numerous international awards and are featured in premium brands world-wide.

Thanks for your attention!

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