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# Laricyl® BC 10111

Astringent Agent and Skin  
Moisturizer

Skin Care



## Definition / Composition

Laricyl® is a purified, concentrated active, extracted from the pulp of *Fomes officinalis*, a basidiomycete mushroom that grows in Eastern Europe.

Laricyl® has astringent, pore tightening and moisturizing effects on the skin.

### Main components:

Laricyl® is obtained from *Fomes officinalis*, a mushroom also commonly called *Polyporus officinalis*. This bulky basidiomycete grows on the bark of larch trees, is shaped like a rounded cone, and is covered by a hard, cracked rind with yellow or brown spots. See Fig. 1.

In the old French Pharmacopeia *Fomes officinalis* extract was known and used as an elixir of long life.

The mushrooms used to produce Laricyl® are harvested in Russia.

## Skin benefits

### 1. Cutaneous astringency

- This effect, immediately perceptible as a local sensation of cutaneous tightening, can produce an improvement of the skin's tone, or firmness.
- As we age, our skin's elasticity decreases. Cellular activity slows in the epidermal basal layer, the skin's defense against environmental attack is compromised, cell turnover and vitality decrease and the skin loses its firmness.
- The fight against loss of skin tone is preferably based on prevention, by helping the skin to defend itself against external attack. Another approach is to apply actives that stimulate epidermal cellular renewal or strengthen the dermal extracellular matrix, e.g. Ciste'M® or Replexium®. Lastly, one may use astringent actives such as Laricyl® that produce an immediate tightening effect.

### 2. Pore tightening

- In addition to its perceptible astringency, Laricyl® tightens pores, which is particularly useful for oily skin of the forehead and nose.
- Oily skin is excessively shiny and may have large, dilated pores. The cosmetic interest in Laricyl® is to minimize the visible appearance of skin suffering from excess sebum secretion.

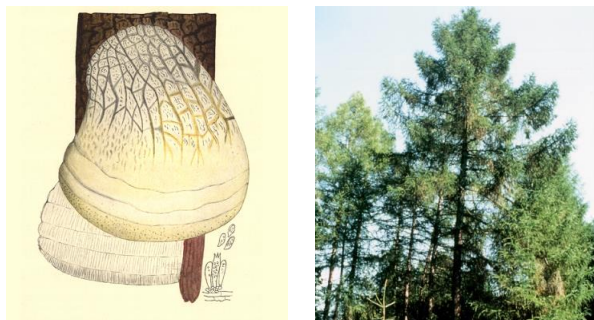


Fig. 1 - *Fomes officinalis*, a mushroom from Eastern Europe and source of the active fraction of Laricyl®.

## Brief Overview: Laricyl® BC 10111



**INCI:** Butylene Glycol (and) Fomes Officinalis (Mushroom) Extract (and) PEG-40 Hydrogenated Castor Oil

**China registration:** The INCI name is currently listed in the IECIC 2015 and/or positive lists of the Cosmetic Safety and Technical Standard (2015 version).

**Appearance:** Yellow to amber-colored, clear to opalescent syrupy liquid with a weak characteristic odor

**Preservative:** None

**Recommended dosage:** 2-5 %

**Mode of incorporation:** Laricyl® BC 10111 is incorporated into the cosmetic product below 50°C, during the finishing process, or at room temperature for cold processing. Suitable pH 6 to 8.

- For a comprehensive treatment of oily skin, the activity of Laricyl® may be complemented by Bix'Activ® or Sebaryl® FL, actives which regulates sebaceous secretion or by Elestab® HP 100, a broad-spectrum antimicrobial active.

### 3. Moisturizing effect

One of the advantages of Laricyl® is that its astringency and pore tightening effect do not dry the skin.

On the contrary, Laricyl® moisturizes the *stratum corneum*, making the skin supple.

#### Cosmetic Use:

- Anti-age care, astringent, skin firming care.
- Eye contour care, care of the neck and bust.
- Care and hygiene for oily skin, with or without acneic tendency.
- Body care: toning, local firming preparations.

### Efficacy Tests

#### Evaluation of astringent effect and cutaneous pore tightening (*in vivo*)

##### Aim

The astringency of an aqueous lotion containing 3% Laricyl® was compared to that of a placebo lotion and two benchmark lotions: one containing 3% Hamamelis (Witch Hazel) extract, the other containing 0.10% zinc parphenolsulfonate. The pore tightening effect of the lotion containing 3% Laricyl® was quantified by photography and image analysis.

##### Protocol

- The clinical study had five trained female volunteers with oily facial skin, especially on the forehead test area.
- Measurements were performed at controlled temperature and relative humidity.

- Each judge participated in eight double-blind, randomized tests, for a total of 40 tests.
- After application of the four lotions (each pre-warmed to 37°C), the judges ranked them from most astringent (1) to least astringent (4).
- Pore shrinkage was visualized using microscopy with quantitative image analysis.

### Results

#### a) Activity of cutaneous astringency\*

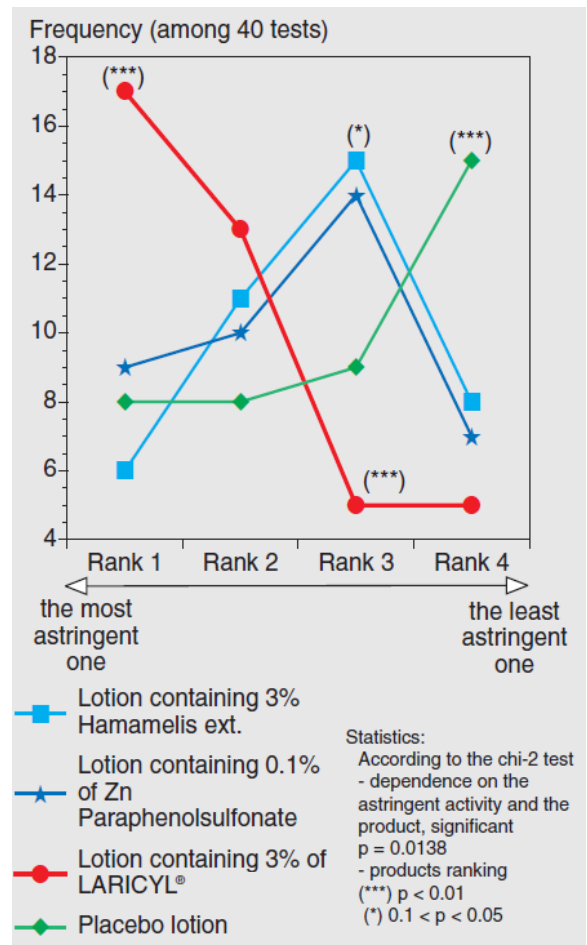
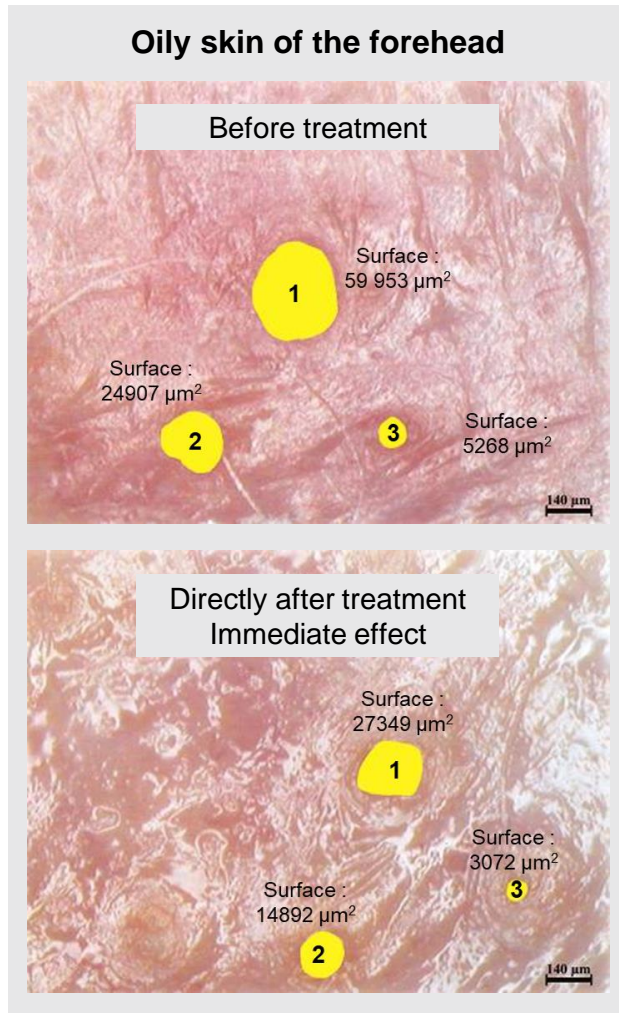


Fig. 2 - Comparison of the cutaneous astringency of four lotions: a placebo, one containing 3% Laricyl® and two benchmark lotions: one containing 3% Hamamelis extract and one containing 0.1% zinc para-phenol-sulfonate. Results of 40 tests performed by 5 judges.

\* Test done with Laricyl® LS 8865 (same active matter content as Laricyl® BC 10111)

## b) Pore tightening activity\*

Photographs showing pore shrinkage by a lotion containing 3% Laricyl®. The pores are highlighted in yellow for quantitative image analysis.



Pore	Surface of pores being analyzed ( $\mu\text{m}^2$ )		
	Before treatment	Directly after treatment	Improvement
1	59 953	27 349	54 %
2	24 907	14 892	40 %
3	5 268	3 072	42 %

Fig. 3 - Visualization and quantification of the pore shrinkage effect of Laricyl®.

## Conclusion

This sensory study showed that the astringency of a lotion containing 3% Laricyl® is significantly greater than that of a placebo lotion and two benchmark lotions containing, respectively, 3% Hamamelis extract and 0.10% zinc parphenolsulfonate. The reduction in pore size, measured by microscopy and quantitative image analysis, varies between 40% and 60%.

## Moisturizing activity on stratum corneum (ex vivo) \*

### Aim

The moisturizing efficacy of a gel containing Laricyl® (2% or 5%) was compared to that of a placebo gel.

### Protocol (Fig. 4)

Stratum corneum specimens were prepared from excised human skin.

The stratum corneum specimens were then mounted on sample holders and placed in a test chamber of controlled temperature and humidity.

Dielectric conductivity measurements were performed under the conditions shown in Fig. 5.

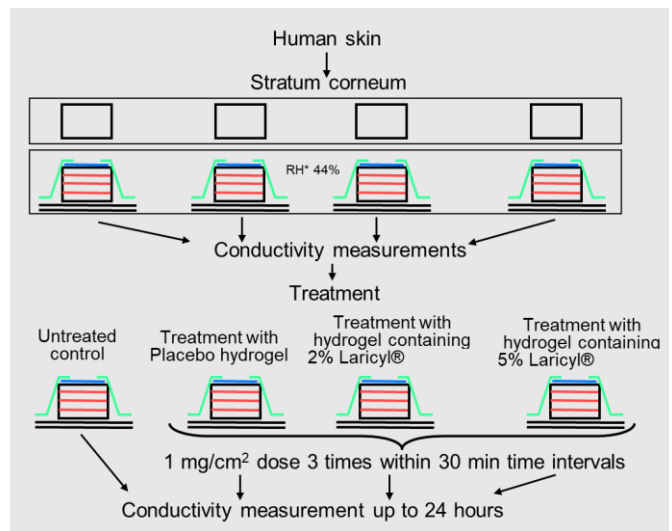


Fig. 4 - Test protocol.

\* Tests done with Laricyl® LS 8865 (same active matter content as Laricyl® BC 10111)

## Results\* (Fig. 5)

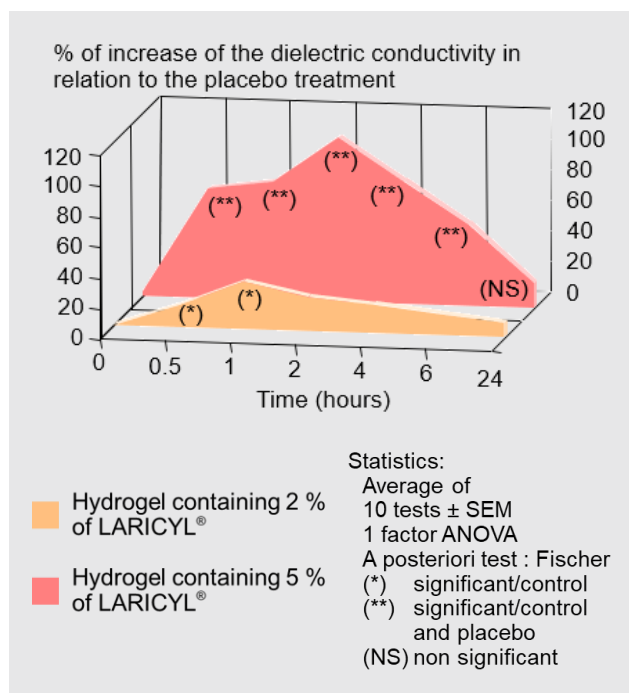


Fig. 5 - Moisturizing effect of Laricyl® at 2% and 5% compared to placebo.

\* Test done with Laricyl® LS 8865 (same active matter content as Laricyl® BC 10111)

## Conclusion

Laricyl® (at 5%) has a significant moisturizing effect on the *stratum corneum*.

**Publisher**

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