



Introduction:

The bark of the red willow (*Salix Purpurea*) contains a lot of active substances and for thousands of years the plant has been used for medicinal purposes. The ancient Egypt's, Chinese, Greeks and the native Americans among others, used the anti-inflammatory effects of the willow bark.

Salixin Organic Extract - 800NP is a preservative free cosmetic ingredient based on *Salix Purpurea* Bark.

All willow is grown in Denmark and extracted/refined on Salixin's own factory - full traceability available and sustainable production.

INCI: *Salix Purpurea* Bark Extract, Aqua, Glycerin, Lactic Acid.

Applications:

- Prebiotic
- Anti-Inflammatory
- Anti-Acne

- Anti-Itching
- Anti-dandruff
- Anti-age

Efficacy:

In-vitro:

- Anti-inflammatory: test shows clear anti-inflammatory effect on PMA stimulated keratinocytes.
- Anti-age: test shows clear anti-age effect - even more potent than Resveratrol.
- Pre-biotic effect: test of skin microbiome microorganisms indicates prebiotic effect.

In-vivo:

- Oral Care: a) test of mouthwash with placebo shows reductional effect on bleeding gums. b) test with mouthwash and 15 volunteers shows very good effect on gum inflammations.
- Atopic Skin: test of Lotion with 800NP reveals good effect on atopic skin conditions - lowers itching and reduces redness.

Safety:

- In-Vivo patch test shows that the ingredient is not irritating the skin.
- In-Vivo patch test shows no photo-toxic effect.

Dose:

- Typical use in leave-on products is 0.4-2%
- Typical use in wash-off products is 1-4%
- Typical use in mouthwash products is 2-4%

Studies

- Effect of compound Salixin Organix Extract – 800 NP® on IL-8 release by PMA-stimulated keratinocytes.
- Screening of the Antiage Effect of 1 Active ingredient at 4 dosages in human primary senescent skin cells.
- Evaluation of the efficacy of a product on a panel of volunteers having itching and inflamed gums.
- Evaluation of the hydrating activity of a product on a panel of volunteers having an atopic skin.
- Dermatological test report semi-occlusive patch test.
- Determination of phototoxicity of cosmetic product.