

ABS Willow Bark Extract

Revolutionary + Natural + Antimicrobial



Tomorrow's Vision... *Today!*[®]

ABS Willow Bark Extract

Technical Information:



Product Code: 10200

INCI Name: Salix nigra (Black Willow) Bark Extract

INCI Status: Approved

Suggested Use Levels: 1.0–10.0%

Suggested Applications: Natural Preservation, Exfoliation, Problem Skin

ABS Willow Bark Extract

Antimicrobial Effects:

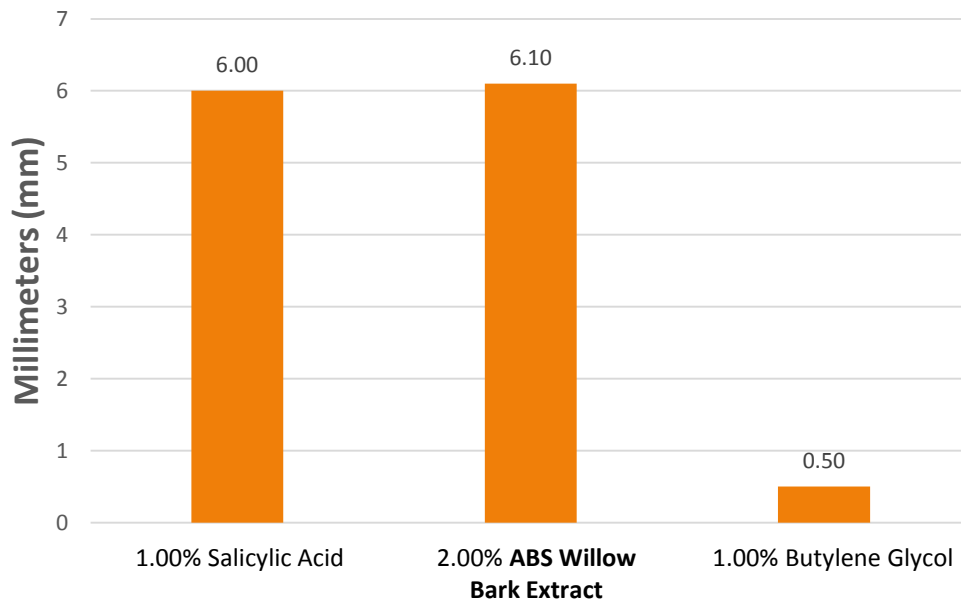


- Salicylic acid has been identified as part of a plant's endogenous defense mechanism against invading pathogens
- The bark of the Black Willow, used interchangeably with *Salix alba* or White Willow, is a source of salicylic acid-like ingredients
- **ABS Willow Bark Extract** is standardized for 10% salicylates



ABS Willow Bark Extract Efficacy Assay Results

Efficacy of ABS Willow Bark Extract
against *S. aureus*



Protocol

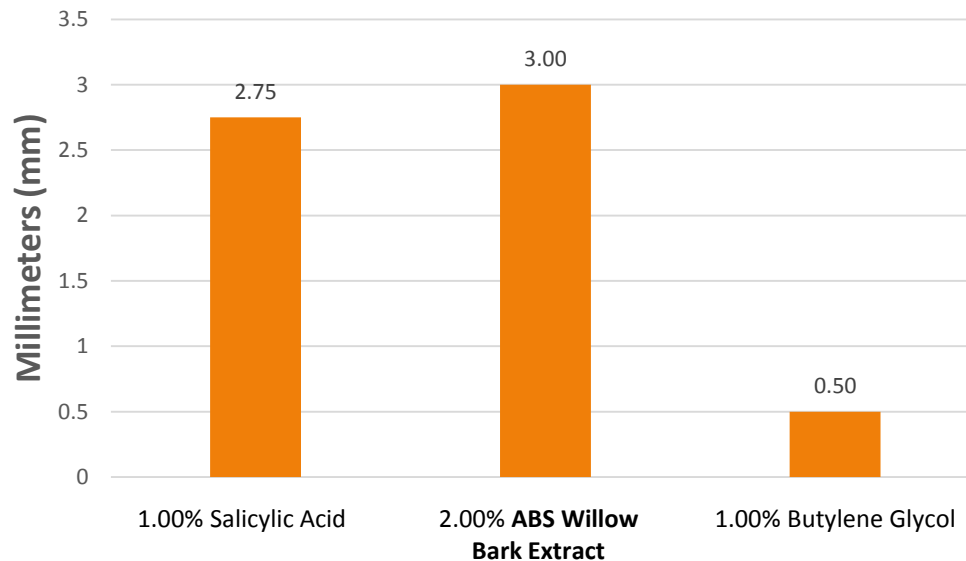
The zone of inhibition for 2.00% **ABS Willow Bark Extract** was determined in relation to the zones of inhibition for 1.00% Salicylic acid and Butylene glycol against both *S. aureus* and *P. acnes*.

Results:

2.00% **ABS Willow Bark Extract** was as effective as 1.00% Salicylic Acid in inhibiting the growth of *S. aureus*

ABS Willow Bark Extract Efficacy Assay Results

Efficacy of ABS Willow Bark Extract
against *P. acnes*



Protocol

The zone of inhibition for 2.00% **ABS Willow Bark Extract** was determined in relation to the zones of inhibition for 1.00% Salicylic acid and Butylene glycol against both *S. aureus* and *P. acnes*.

Results:

2.00% **ABS Willow Bark Extract** was more effective than 1.00% Salicylic Acid in inhibiting the growth of *P. acnes*

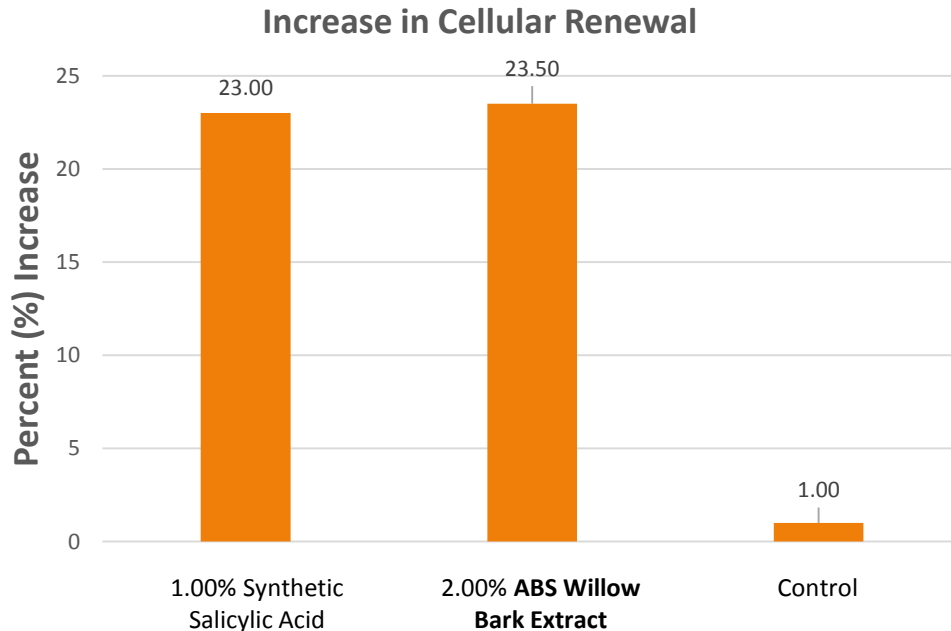
Salicylic Acid & UV Damage



- Salicylic acid has been found to significantly inhibit UVB induced NF- κ b activation in keratinocytes
 - NF- κ b (Nuclear Factor Kappa B) is a cell signaling molecule for inflammation. Its activation induces the expression of COX-2, which leads to tissue inflammation
- Salicylic acid was also found to have an anti-inflammatory effect on normal keratinocytes

Reference: Mammone, Thomas. *et al.* (Estee Lauder Companies) Salicylic Acid Protects the Skin from UV Damage. Society of Cosmetic Chemists Annual Scientific Meeting and Technology Showcase 2005.

ABS Willow Bark Extract Efficacy Assay Results



Protocol

- 15 female test subjects
- Control: 5.00% Petroleum base Dansyl Chloride solution
- Test materials:
 - a. 1.00% Synthetic Salicylic Acid (aqueous solution pH 3.90)
 - b. 2.00% **ABS Willow Bark Extract** (1.00% Salicylic Acid)
- UV light was used to determine the color intensity relative to the level of binding and percent increase in cell renewal

Results:

2.00% ABS Willow Bark Extract was more effective than 1.00% Synthetic Salicylic Acid in increasing cellular renewal

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Benefits:

- ✓ Enhances cell turnover
- ✓ Replacement for synthetic salicylic acid
- ✓ Natural Preservation
- ✓ Exfoliates
- ✓ Treats Problem Skin



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