



# Bio-Saponins™

## THE NATURAL SURFACE ACTIVE AGENT

Natural detergent, foaming agent and emulsifier

Saponins are naturally occurring high-molecular-weight glycosides with distinct foaming characteristics. They are found in many plants, but get their name from the soapwort plant (*saponaria*), of which the root was historically used as soap. The name *saponin* is derived from the Latin word *sapo*, which means soap.

**Bio-Saponins™** is a propriety blend of Sarsaparilla Root, Wild Yam Root, Quillaja Root and Yucca Root.

### Applications:

Saponins are high-foaming agents and therefore excellent to use when natural surface active compounds are required. Saponins are excellent when used in soaps, shampoos, creams, lotions shaving products, body washes, etc. Bio-Saponins™ is also ideal for natural toothpaste.

**INCI Name:** Saponins

**CAS:** 11006-75-0

**EINICS:** 232-462-6

72231-29-9

8047-15-2

### Studies:

Surface tension, Foaming Index and Foam Stability were compared to Tween 80 & SLS (Sodium Lauryl-Sulfate)

Surface tension – Similar to Tween 80 and slightly less than SLS.

Foaming Index - Better than Tween 80 and SLS.

Foaming Stability - Better than Tween 80 and SLS.

(See additional literature for more information)

### Testing:

Bio-Saponins has been evaluated for Ocular Irritancy Potential with the Hen's Egg Test, utilizing the ChorioAllantoic Membrane (HET-CAM). Under the conditions of the test, the results indicated that the product at 10% showed practically no ocular irritation potential. (A copy of the test results is available upon request).

Additional literature on Bio-Saponins™ available on request.

**Pack size: 5 kilos**

*See reverse side of suggested formula.*



BIO-BOTANICA® INC.



# Bio-Saponins™

## Natural Foaming Toothpaste

### INCI NAME (Supplier)

	%LEVEL
1. Deionized Water	37.43
2. Sodium Monofluorophosphate	0.76
3. Glycerin	12.50
4. Cellulose Gum	0.20
5. Carrageenan	2.00
6. Calcium Carbonate Heavy	40.00
7. Calcium Carbonate Light	3.00
8. <b>Bio-Saponins™</b> (Bio-Botanica®, Inc.)	2.00
9. Sodium Bicarbonate	0.01
10. Sodium Saccharin	0.26
11. Peppermint Flavor	1.73
12. Spearmint Flavor	0.01
13. Illicium Verum (Anise) Oil	0.07
14. Menthol	0.03

### PROCEDURE

- Dissolve item 2 in item 1.
- Combine items 4 & 5 then "wet" with item 3.
- Combine step A and step B with mixing.
- Heat batch to 75°C.
- Add items 6-8 with mixing.
- Remove heat and let batch cool with mixing @50°C. Add items 9 & 10.
- Premix items 11-14, and then add to batch, mixing well.

### SPECIFICATIONS

<b>APPEARANCE:</b>	Non-flowing uniform toothpaste
<b>COLOR:</b>	Light tan to tan
<b>pH:</b>	5.00-6.00
<b>SPECIFIC GRAVITY:</b>	0.9000-1.2000

NOTE: The suggested uses of botanicals are presented here solely for their educational value. We cannot anticipate all conditions under which this information and our products, or the product of other manufacturers in combination with our products, may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products, either alone or in combination with other products. Users are advised to make their own tests to determine safety and suitability of each such product or product combinations for their own purposes. Unless otherwise agreed in writing, we sell the products without warranty, and buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of our products, whether used alone or in combination with other products.



BIO-BOTANICA® INC.