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.

INCI NAME: CAS NUMBER: EINECS NUMBER:

Yucca Schidigera Root Extract	N/A	N/A
Quillaja Saponaria Bark Extract	68990-67-0	273-620-4 (I)
Smilax Aristolochiaefolia Root Extract	97404-52-9	N/A
Dioscorea Villosa (Wild Yam) Root Extract	90147-49-2	290-441-7 (I)

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 $^{\text{TM}}$ is also ideal for natural toothpaste.

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-SaponinsTM 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-SaponisTM available on request.