



Dow Corning PROPRIETARY

Abstract on Silicone Benefits in Toilet Soap Bar

Global Toilet soap consumption was estimated to be 3.4 million tonnes in 2004 and the market is expected to grow at a rate of 1.4%. This growth is mainly driven by Asia followed by South America, Africa and the Middle East.

In India Soap market is around Rs. 5100 cr. (USD 1185 million) and is growing steadily at about 8-9% every year, with household penetration of around 98%. Soap market in India has evolved over the years from a purely cleansing product to a product that now offers multiple benefits and functionality. Need to continuously differentiate and capture market in such highly price sensitive segment had made soap manufactures to move from a traditional mass market position to a more niche and specialized position.

Current trend is introduction of soaps with various herbal and antibacterial actives that can offer personal protection and hygiene along with skin care properties like moisturizing, mildness, etc.

As soaps are highly alkaline in nature, making skin feel dry, there has always been need to provide Moisturization and emolliency benefits to the skin. Silicones are known to provide Moisturization and emolliency benefits in skin care, however silicones are not explored much in such price sensitive segment. With emerging trend of offering higher Moisturization and emolliency claims, potential use of silicones in soap bar market was evaluated.

Silicones were selected based on market segment distribution so to be positioned for both mass and premium market. Various performance studies like Weight loss, Wear rate or Use up test, Mush/Slough formation test, Foam height /Lather test and cracking test were carried out to study effect of soap containing silicones.

It was found that soaps with silicones Dow Corning CB 3031®, DC HMW 2220® and DC 7-3121® can provide multiple benefits like reduction in mush/slough formation, reduction in cracking with improved surface finish and can also enhance foam quality.

Sensory studies using volunteers was carried out both internally as well as externally to evaluate skin softness and Moisturization benefits post application of soaps. In sensory panel testing soaps with HMW 2220® and 7-3121® Shea butter emulsion showed improved Moisturization post application over control soap.

Moisturization study was also carried out externally using Corneometer to determine moisturization efficacy of soap containing silicones. Study revealed that all tested silicones can provide moisturization benefits against control soaps. In particular soaps with HMW 2220® and 7-3121® emulsions had showed to provide maximum moisturization over period of time against control.

Overall silicones in soaps can provide multiple benefits like reduce cracking and mush formation, enhance foam, improve surface gloss and shine along with providing Moisturization and emolliency benefits during and post application. Hence from the study it is implied that there are many benefits of silicone in soap bar, which can be introduced to the consumers, particularly in India and Asia region.

For the mass market Dow Corning CB 3031® can be used to provide improved foam and texture benefits while for premium market HMW 2220® and 7-3121® emulsions can provide higher Moisturization and emolliency benefits along with enhanced sensory feel during and post application.



Presentation by: Amol Wakhare
AETS LIFE SCIENCE
DOW CORNING INDIA Pvt. Ltd.