

# PALM-BASED COSMETIC PRODUCTS WITH PEARL POWDER

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MPOB TT No. 199-J Pearl Soap  
MPOB TT No. 200-J Pearl Facial Toner  
MPOB TT No. 201-J Pearl Facial Cleansing Milk  
MPOB TT No. 202-J Pearl Moisturizing Facial Cream

In this modern IT oriented world, consumers are exposed to a lot of high technology oriented products. Yet when it comes to cosmetic and skin care preparation, many seems to be turning back to the familiar, particularly products related to nature or simply natural. Currently, the natural product category is flourishing, with many manufacturers claiming their products to be natural or naturally derived. Consumers often associated the term natural with vegetable/plant derived, mild and environmentally friendly products. Palm-based oleochemicals and their derivatives are some of the alternatives for natural or naturally derived raw materials for cosmetic preparation. Currently, palm-based oleochemicals, such as glycerin, fatty alcohols, fatty esters and fatty amines are widely used in cosmetic and personal care products to serve various purposes such as emulsifiers, humectants, emollients, lubricants and conditioners. In addition to palm-based ingredients, natural active ingredients such as pearl powder could be added to enhance the performance of palm-based formulations as well as providing richness to the products.

## PEARL POWDER AS ACTIVE INGREDIENT

Pearl is one of the most valuable crystals. Unlike gems, which are mined from beneath the earth, pearl are formed inside the shell of oysters. Mineral gems are normally hard and usually reflect light, pearls on the other hand are rather soft and they absorb as well as reflect light. Chemical composition of pearl showed that they are rich in protein, calcium, vitamin B complex, polysaccharides and minerals. According to Compendium of Materia Medica,

pearl has been used for medicinal purposes for over 2000 years. Taken internally, pearl powder is believed to be able to detoxify the skin, preserve youthful appearance, remove age and liver spots on skin, relieve stress, treat sore throat, regulate metabolism and energize the body ([www.emperorsherbalogist.com](http://www.emperorsherbalogist.com)).

When used topically, pure pearl powder is known to keep skin smooth, soft and lustrous looking. This could be due to the ability of pearl to absorb and reflect light as well as the presence of protein and other minerals. In addition, pearl is also known to be able to moisturize and renew skin cells as it is rich in natural moisturizing agents and protein (Diversified Medical Resources).

Based on these favourable information on the advantages and goodness of pearl powder, MPOB, in collaboration with Herba Al Nabawiy has developed a range of skin care products with pure pearl powder as active ingredient and the advantages of each products are as summarized.

## PALM-BASED FACIAL CLEANSER

Most facial contamination is oily, either from make-up or sebum combined with perspiration and atmospheric pollution. These oily residues can be removed by using facial cleanser, which is normally in the milk form of (pourable) oil in water emulsion. This palm-based cleansing milk with pearl powder is formulated with high quality palm-based materials with mild emulsifiers to emulsify the oil residues, enabling it to be removed with damp cotton wool, leaving the skin feeling cleaned and refreshed. The ability of the formulation to remove soil is evaluated using silk soiled cloth (silk soiled with cosmetic soil/sebum) at 0.1% concentration, water hardness 50 ppm and 350 ppm at room temperature. The results indicated that palm-based cleansing milk with pearl powder remove soil better at 50 ppm and 350 ppm water hardness



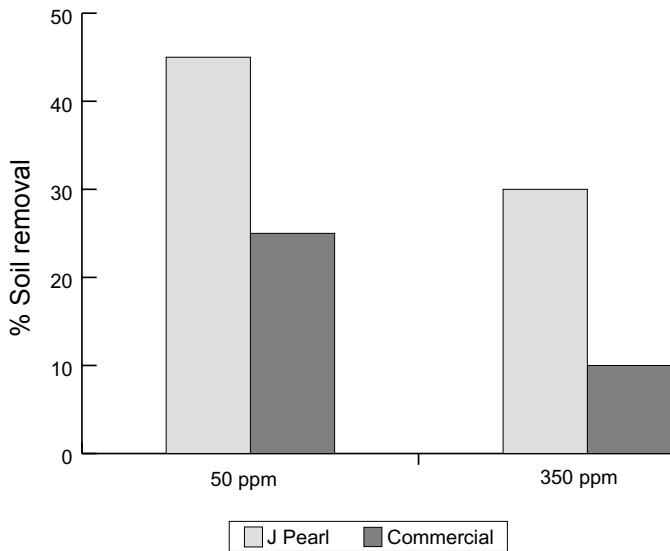


Figure 1. Detergency of facial cleansing milk at 0.1%/RT/silk.

compared to the commercial sample as indicated in Figure 1.

### PALM-BASED FACIAL TONER

The palm-based facial toner is to be used after cleansing the face with facial cleansing milk to close the exposed pores. The formulation contains natural moisturizing factor to impart smooth and soothing feel after application.

### PALM-BASED MOISTURIZING FACIAL CREAM

When our skin is clean and refresh, it needs protection and replenishment of lost natural oils and moisture regulators. Palm-based moisturizing cream with pearl powder is particularly designed to be used during daytime to protect the skin from the environment. The presence of pearl powder, which is rich in natural protein and amino acids helps to moisturize the skin throughout the day. In order to protect the skin from the harmful effect of UV radiation, sunscreen agents are added to give an SPF of 10.

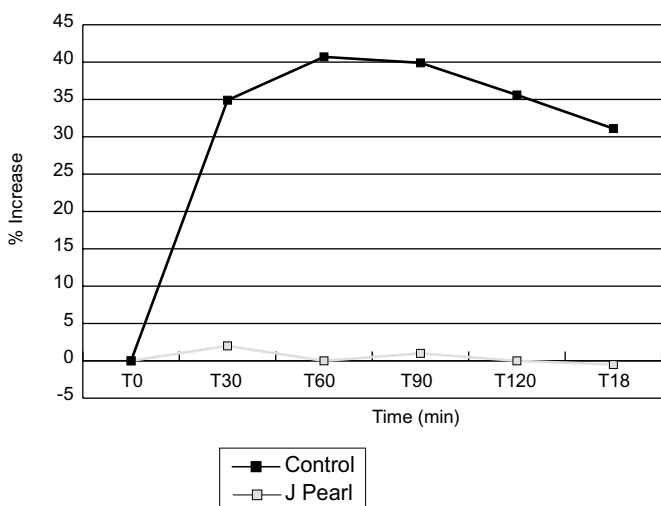


Figure 2. Increase in skin hydration vs. control (untreated).

Efficacy study conducted on 20 human volunteers showed that the product is also able to moisturize the skin after a single application and the skin remains moisturized even after 4 hr of application compared to the untreated area.

### PALM-BASED SOAP WITH PEARL POWDER

The formulation of soap bars has become more complex over the years due to the need to increase functionality of the soaps. Traditionally, soaps were designed for cleaning the skin but over time soaps began to be used as delivery system for perfumes, superfatting agents and active ingredients to the effect that the cleansing aspect has become almost secondary. The palm-based soap with pearl powder is an example of functionality soap which offers the benefits of pearl powder to the consumers. Since pearl is a rich source of protein and minerals, it is believed that



Figure 3.

### REFERENCES

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Pearl Powder History and Use. <http://www.emperorsherbalogist.com> (23/4/03)

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