

## **FORMULATION OF ENCAPSULATED JOJOBA OIL ACTIFILMS FOR BATHBOMB**



**Actifilm™:** Actifilms are films made up of Hydroxypropylmethyl cellulose which is a chemically modified cellulose polymer. The dissolving film delivery vehicle is just a thin flexible sheet of polymer in which an active ingredient has been incorporated. These actifilms magically disappear upon rubbing by delivering dry actives i.e they are visually dry but soften easily when it gets in contact with water, thus they have the amazing properties to soften in the formula making them more malleable and ready to disintegrate when pressure is applied. Umang Pharmatech manufactures **Actifilm™ i.e AF** exclusively available in shapes and varieties of colors available for personal care applications.

**KEYWORDS:** Encapsulated films, fast dissolving films, films for special effects, HPMC films, dissolving films for bathbomb, water soluble films for decoration.

### **JOJOBA OIL:**



The nut of the jojoba plant is made into an oil. Jojoba oil contains natural vitamin E.

Vitamin E acts as an antioxidant that helps to produce collagen in body. Thus jojoba oil helps your skin fight oxidative stress caused by everyday exposure to pollutants and other toxins. Jojoba oil contains antimicrobial and antifungal properties.

### **WHY ENCAPSULATED JOJOBA OIL ?**

Encapsulation Technology used in the development of cosmetic formulations that more stable, more effective and with improved sensory properties. Encapsulated jojoba oil helps relieve dryness, flaking, itching, and related symptoms of skin naturally. Inflammatory skin conditions like psoriasis and eczema is treated by encapsulated jojoba oil as it is extremely beneficial due to its healing properties.

*Different Shapes/Colours of Actifilms*



### **INCI NAME:**

Simmondsia Chinensis

### KEY PROPERTIES OF ACTIFILMS:

- Non GMO & Paraben free
- Easy to handle at the industrial scale
- Natural ,Non toxic and Non irritant , and non-allergenic properties
- Gentle and effective on skin with rapid dispersion and excellent uniformity
- Available in different shapes & colors
- Provides visual effects and activates four senses you can see, smell, taste & touch it and disappears on rubbing the product.

### EFFECT OF ENCAPSULATED JOJOBA OIL IN BATHBOMB



Bath bombs are single-use, spherical blends of smoothing, fragrant extracts and oils. The primary ingredients of bath bombs are sodium bicarbonate and citric acid, which interact with each other once dissolved in water to create that fizzing effect. Once this reaction occurs, the bath bomb dissolves and breaks apart, releasing all the good stuff inside: from delicious scents to delivering actives that gets dispersed into water to provide clear, soft, healthy and glowing skin. Encapsulated Jojoba oil not only deodorize, clean and repair skin. Encapsulated Jojoba oil has a variety of healing properties that it is effective in treating skin conditions like acne, eczema, and psoriasis.

### FORMULATION PROCEDURE:

**Step I:** Dry mixing of Xanthan Gum and Citric acid .

**Step II:** Dry mixing of sodium bicarbonate and sodium starch glycolate.

**Step III:** Dry mixing of mannitol, cross caramellose ,sodium lauryl sulphate.

**Step IV:** PVPK-30,colour ,purified water (solution preparation)

**Step V:**Addition of Step I , II , III is added to the mixture.Stirring under vaccum is resumed without further heating.

**Step VI:**Addition of Step IV into Step V followed by addition of fragrance .The fragrance added is mixed under vaccum at room temperature. Encapsulated Jojoba Oil actifilms are added at the end of manufacturing at moderate temperature and at slow stirring.

**DOSAGE:** 0.2 % for visual effect and up to 10 % for colour or active delivery.

**STORAGE:** Temperature between 5° C - 25°C

FORMULATION TIP	
BATHBOMB	
Ingredients	Qty (%)
Xanthan Gum	55.05
Citric acid	24
Sodium bicarbonate	30
PVPK30	2
Sodium Starch Glycolate	2
Mannitol	5
Cross caramellose	1
Fragrance :Rose	1
Color:Blue	1
Actifilms with Jojoba Oil	0.2
Purified water	Up to 100%