

## **FORMULATION OF ENCAPSULATED AVACADO OIL ACTIFILMS FOR BATH BOMB**

**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. 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 .

### **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.

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

**INCI NAME:** Persea gratissima (**Avocado**) Oil

### **AVACADO OIL**



Avocado oil is a thick and heavy fast absorbent oil derived from avocado seeds. Avocado oil is loaded with omega-3 fatty acids and vitamins A, C, D, and E also it contains fatty acids that are beneficial for skin. Beta carotene, protein, lecithin, found in avocado oil helps moisturize and protect your skin from damaging UV rays and increase collagen metabolism. Avocado oil is a wonderful antimicrobial, antioxidant and anti-inflammatory skin care moisturiser.

### **Different shapes/colours of Actifilms**



## WHY ENCAPSULATED AVACADO OIL?

Encapsulation Technology is used in the development of cosmetic formulations that more stable, more effective and with improved sensory properties. Essential oil encapsulation improves thermal stability. Encapsulation of avocado oil is carried out and applied for personal care uses as encapsulated avocado oil contains antioxidants and anti-inflammatory agents that helps skin stay smooth, strong, and elastic.

## EFFECT OF ENCAPSULATED AVACADO OIL IN BATHBOMB



Bath bombs are single-use, spherical blends of smoothing, fragrant extracts and oils. These bath bombs are amazing scent therapy with effervescent balls of delight creating an atmosphere of opulence and luxury that refreshes and relieves stress of the body.

The primary ingredients 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 Avocado oil in bathbomb leaves the whole body feeling soft and help to prevent hot water from drying out the skin. Encapsulated avocado oil not only deodorize, clean and repair skin, but also strengthen blood vessels by improving blood circulation and lowering blood pressure, creating more space for blood to flow. Avocado oil increases collagen synthesis and thus helps in skin conditions like skin redness, wrinkles 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 III:** PVPK-30, colour, purified water (solution preparation)

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

**Step VI:** Addition of Step IV into Step V addition of fragrance. The fragrance added is mixed under vacuum at room temperature.

Encapsulated Avocado 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	
BATH BOMB	
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 Avacado Oil	0.2
Purified water	Up to 100%