

FORMULATION OF ENCAPSULATED VITAMIN E 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.

KEY PROPERTIES OF ACTIFILMS:

- Non GMO
- Paraben free
- Natural, non-toxic, non-comedogenic and non-allergenic properties
- Gentle and Effective on skin
- Rapid dispersion with excellent uniformity.
- Provide visual effects and delivery actives
- Activates four product senses you can see, smell, taste & touch it and disappears on rubbing
- Nature friendly as soluble in water

VITAMIN E



Vitamin E is one of nature's best anti-oxidants, as it defends your cells against damage on a daily basis and protects the skin's delicate fatty acids from oxidation

and destruction. It effectively fights off melanin deposits, providing anti-inflammatory protection.

INCI NAME:

Tocopheryl acetate

WHY ENCAPSULATED VITAMIN E ?

Encapsulation Technology is used in the development of cosmetic formulations that are more stable, more effective and with improved sensory properties. Vitamin E is encapsulated because of its antioxidant effects and also as it enhances moisturization and strengthens the skin barrier. As one of the most powerful oil-soluble antioxidants and free-radical scavengers available, Vitamin E when encapsulated plays a crucial role in oxidative regeneration of skin exposed to stressors

EFFECT OF ENCAPSULATED VITAMIN E IN BATHBOMB :



Bath bombs are single-use, spherical blends of smoothing, fragrant extracts and oils. 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 Vitamin E 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. Vitamin E delivers its natural antiseptic and antimicrobial properties by calming, softening, toning, invigorating, antispasmodic properties and anti-inflammatory effects on the skin.

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 carmellose 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 vacuum 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 vacuum at room temperature.

Encapsulated Vitamin E 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 carmellose	1
Fragrance :Rose	1
Color:Blue	1
Actifilms with Vitamin E	0.2
Purified water	Up to 100%

Different Shapes/Colours of Actifilms



Golden colour Snowman shape Green colour cross shape Golden colour Tree shape