

FORMULATION OF ENCAPSULATED LEMON OIL FILMS FOR SOAP

Actifilms™ AF is made up of Hydroxypropyl Methyl Cellulose which is a chemically modified cellulose polymer. HPMC is a water soluble synthetic polymer which was used as film former. It is a thin, flexible sheet of polymer in which an active ingredient has been incorporated. Films are rapidly disintegrate and also have greater stability and shelf life. Umang Pharmatech manufactures Actifilms™ i.e AF exclusively available in shapes and varieties of colors available for many personal care applications .

LEMON OIL:

Lemon Oil obtained from Lemon fruit of the *Rutaceae* family through process of cold extraction. It is an essential oil greenish-yellow in color. Lemon oil is a good content of Vitamin A,B and C. It is rich source in bio-active compound. It contain phytochemicals, polyphenols, terpenes and tannins. Lemon Oil has antibacterial and anti-fungal activity. It is a natural oil, nontoxic and does not leave any residue. Lemon Oil use for the cosmetic products due to its exclusive fresh aroma.

TECHNOLOGY

Umang Pharmatech has used the Pharmaceutical's popular technology i.e. Encapsulation and Film Casting Technology to Develop Actifims™ with incorporation of desirable actives in personal care formulations to obtained better Visual impact, deliver desirable actives ingredients and provide stable films within the formulation.

INCI NAME:

Citrus medica limonum (Lemon) Peel Oil

KEY PROPERTIES OF ACTIFILMS™:

- Easy to handle at the industrial scale.
- Disappear on gentle rubbing without leaving any residue on skin use upon application.
- Non toxic and Non irritant ,soluble in water. Available in natural flavors.
- Available in different shapes & color
- Film have more flexibility and better physical properties.



EFFECT OF ENCAPSULATED LEMON OIL FILMS FOR SOAP:

Lemon Oil has astringent and antiseptic properties, It is use for the facial cleanser and help to treating the damage skin cell also reduce the excess oil of the skin. Lemon oil may help to remove the acne and hydrate the skin, it has a strong antioxidant property and anti-aging effect. Lemon oil act as a natural cleanser. It protect from body bacteria, fungi and harmful pathogens.

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

STORAGE: Temperature between 5° C and 25° C

FORMULATION PROCEDURE :

Stage 1:

Add all components to water

Stage 2 :

Heat to 70C.

Stage 3:

Blend until homogeneous; cool to 50C.

Stage 4:

Adjust pH to 7.0-7.5 with Citric Acid.

Stage 5:

Add DMDM Hydantoin and Fragrance.

Stage 6:

Actifilms™ was added at the last stage and mix it very slowly.

Stage 7:

Cool to room temperature.

FORMULATION TIP	
SOAP	
Ingredients	Wt%
Potassium Cocoate	25.00
Disodium Cocoamphodiacetate	20.0
Lauramide DEA	2.00
Glycol Stearate	1.0
Actifilms™	0.2
DMDM Hydantoin	q.s
Fragrance	q.s
D.I. Water	qs

KEY WORDS:

Encapsulated films ,Films for special effects ,HPMC films, dissolving Films.



Tree Shape



Snowman Shape



Heart Shape



Star Shape