

FORMULATION OF ENCAPSULATED TULSI OIL FILMS FOR ORAL CARE



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

TULSI OIL:

Tulsi as an Ayurveda drug. It called 'Holly Basil'. It is a sacred plant of India from the family *Lamiaceae*. Tulsi Oil is pungent and bitter in taste. Tulsi Oil contains eugenol volatile compound, eugenal, carvacrol, methylchavicol, limatrol and caryophylline. Tulsi Oil have a many useful properties like Anti-inflammatory activity, Anti-fungal activity and Antibacterial Activity.

TECHNOLOGY

Umang Pharmatech has used the Pharmaceutical's popular technology i.e. Encapsulation and Film Casting Technology to Develop Actifilms™ 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:

Ocimum Basilicum (Tulsi) Oil

KEY PROPERTIES OF ACTIFILMS™:

- Easy to handle at the industrial scale.
- Disappear on gentle rubbing without leaving any residue on teeth / oral case 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 TULSI OIL FILMS FOR ORAL CARE:

Tulsi Oil contain eugenol which can help to reduce the toothache. Tulsi oil has an antibacterial activity which control the growth of bacteria in mouth and preventing the infection. It also provide the freshness in breath and keep aside bad breath. Tulsi Oil make it a powerful treatment for gum disease due to its anti-inflammatory and anti-infectious properties.

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

STORAGE: Temperature between 5° C - 25° C

FORMULATION PROCEDURE :

Stage 1:

Calcium carbonate, hydrated silica, titanium dioxide was weighed and mixed by adding sorbitol to it.

Stage 2:

In a beaker glycerin, Sodium saccharine, Sodium CMC was mixed together and added to Stage 1

Stage 3:

Sodium lauryl sulphate and NaCl was weighed and was mixed using 10ml water and mixed with Stage 1

Stage 4:

Actifilms™ was added at the last stage and mix it very slowly without pressuring the beads very hardly.

FORMULATION TIP	
TOOTHPASTE	
Ingredients	Qty (%w/w)
Calcium carbonate	25
Hydrated silica	10
Sodium lauryl sulphate	2
Sodium chloride	1
Glycerin	10.3
Sorbitol	10
Sodium CMC	0.8
Titanium dioxide	0.1
Sodium Saccharine	0.25
Sodium benzoate	0.08
Actifilms™	0.2
Distilled Water	QS

KEY WORDS:

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



Christmas Tree Shape



Heart Shape