

FORMULATION OF ENCAPSULATED MENTHOL 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 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 .

MENTHOL :

Menthol is a cyclic alcohol obtained from the volatile oils of various species of *Mentha*. Menthol also known as DL-menthol or 3-p-menthanol, It is a waxy, crystalline substance, clear or white in color, which is solid at room temperature. Menthol is largely used as a flavoring or olfactory agent in a variety of products.

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 obtain better Visual impact, deliver desirable active ingredients and provide stable films within the formulation.

INCI NAME:

Menthol

KEY PROPERTIES OF ACTIFILMS™:

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

Menthol provides cooling sensation, minty odor and taste. It can inhibit the growth of bacteria in the mouth and also helps to prevent tooth decay. Menthol keep the gum healthy due its anti-inflammatory properties. Menthol control the bad breath and give instantly freshens breath.

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:

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



Menthol Square Shape



Tree Shape