# FORMULATION OF CELLULOSE EXFOLIATORS FOR FACE SCRUB





**EXFOLIATORS:** Natural Exfoliating agents are used to remove dead cells from the surface of skin and improve blood circulation, giving renewed and glowing skin. It keeps face free from dirt, collected sebaceous secretions also improves the skin appearance Exfoliators removes dull flaky skin, evens skin tone and diminishes the look of fine lines to reveal radiance. Natural exfoliation spheres gently exfoliate and deep clean skin while protecting and nourishing it at the same.

Umang Pharmatech provides **Sprayspheres SE® beads** contain natural products specially used for exfoliation.

## **EXFOLIATION BENEFITS:**

- Removal of dead skin cells
- Smoother, firmer skin
- Even-toned complexion
- Refined pores
- Reduces fine wrinkles, hyperpigmentation and scars
- Stimulates blood flow
- Allows for better absorption of moisturizers and serums.

### **CELLULOSE EXFOLIATOR:**

Cellulose exfoliators or cellulose beads, get destroyed during skin application so that they naturally disappear from the body surface without any rinsing. These cellulose particles can be advantageously used in a body care composition, and notably for exfoliating composition. Cellulose exfoliator have an average particle size less than 1 mm and preferably comprised between 200  $\mu$ m and 900  $\mu$ m. Exfoliators like cellulose deeply scraps off dead skin cells and allows new cells to replace them.

## **INCI NAME:**

#### Cellulose

# **PHYSICAL AND CHEMICAL PROPERTIES Appearance** - Free flowing white to(many

different colour)spheres
Solubility – Practically insoluble in water

Bulk Density - NLT 0.6 gm/cc

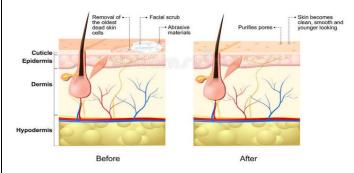
pH Value (1.0% Slurry) - 5.0 to 8.0

Loss on drying - NMT 8.0%

### **KEY PROPERTIES OF CELLULOSE EXFOLIATORS**

- Does not disappear on gentle rub
- Preservative Free.
- Non GMO
- Provides Soft to mild Exfoliation
- Composition has GRAs status.
- Only approved synthetic & natural colors used
- Provide visual effects
- It is natural, non-toxic, non-comedogenic and non-allergenic properties and also biodegradable.
- Soft but effective abrasive, exfoliates naturally restore skin's beauty

# EFFECT OF CELLULOSE EXFOLIATOR IN FACE SCRUB:



Cellulose exfoliators , when contain in a cosmetic composition, are spreadable and disintegrate towards fine cellulose powder upon application on the skin. In face pack surprisingly shows effect that at least 80 %, preferably at least 90%, more preferably at least 95%, even more preferably at least 99% of the beads disintegrate under mechanical stress or during massage movements after an average time less than 3 minutes, when applied on human skin on application.

# FORMULATION PROCEDURE:

**Step I:** Beeswax is melted in a container by using water bath to a temperature of about 70° C. Then

mineral oil is added to the melted beeswax. This is mixture A.

**Step II:** In another container, water is heated to a temperature of about 70° C and borax is dissolved in it. This is mixture B. Mixture B (aqueous phase) is added slowly to mixture A (Oily phase) along with stirring. Stirring is carried out until a creamy emulsion is formed.

**Step III:** Finally, perfume is added to the preparation when it attains a temperature of about 40°C. Cellulose exfoliator is added at the end of manufacturing at moderate temperature and at slow stirring. Shearing or other mechanical stresses should be avoided all manufacturing and filling process.

**DOSAGE:** 0.5 % to 2% for visual effect and up to 10 % for colour or active delivery

<b>STORAGE:</b> Temperature between	5° C	- 25°	С
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FORMULATION TIP			
Face Scrub			
Ingredient	Qty(%ww)	Role O/Ing	
White beeswax	20g	Emollient	
Mineral oil (phase A)	50gm	Lubricant	
Perfume	q.s (0.5)	Odour	
D.W	28.8gm	Vehicle	
Borax $\int$ (phase B)	0.7gm	Buffer	
Cellulose Exfoliator	0.5-2%	Scrubbing agent	

**KEY WORDS:** Exfoliate ,peel off ,\_flake off ,throw out, shed off ,scrap,\_eliminate ,rub ,Exfoliators beads , Scrub beads ,Natural Exfoliators ,Cosmetic beads for aesthetic effects .

## PARTICLE SIZES OF EXFOLIATOR BEADS XS = Extra Small = 0.2 mm VVS = Very Very Small = 0.2 - 0.3 mm VS = Very Small = 0.3 - 0.6 mm S = Small = 0.6 - 0.8 mm M = Medium = 0.8 - 1.4 mm L = Large = 1.4 - 2.0 mm XL = Extra Large = 2 - 5 mm