

## **FORMULATION OF COCONUT SHELL EXFOLIATOR FOR FOOT 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 manufactures **Sprayspheres SE®** beads that 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.



### **COCONUT SHELL EXFOLIATORS:**

Coconut shell exfoliator is a natural remedy that reduces lines and aging signs on skin, and get a glowing and healthy again. Coconut shell is a natural exfoliant and effectively cleans, heals, moisturises and rejuvenates the skin.

Coconut Shell Powder is a skillfully ground of natural crushed shells(coconut) grounded into fine powder which will act like a scrub in your product.It is the perfect addition to tropical themed products and products intended for delicate exfoliation.



### **INCI NAME:**

Cocos Nucifera (Coconut) Shell Powder

### **PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** - Free Flowing brown colour spheres

**Solubility** - Practically insoluble in water

**Bulk Density** - NLT 0.6 gm/cc

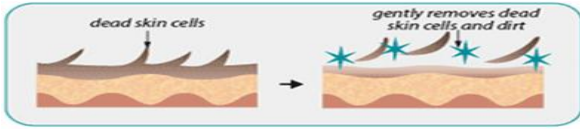
**pH Value (1.0% Slurry)** - 5.0 to 8.0

**Loss on drying** - NMT 8.0%

### **KEY PROPERTIES OF COCONUT SHELL 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
- 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 COCONUT SHELL EXFOLIATION IN FOOT SCRUB:**



Coconut shell exfoliators may be very effective at cleansing the feet and smoothing and softening the skin. Coconut shell exfoliators scrape away dead skin cells from the soles of the feet, and the stimulating effects of exfoliators may help to increase blood flow and circulation in the area enhancing the texture of the skin leaving the feet soft & smooth by removing callused & rough skin.

**FORMULATION PROCEDURE:**

**Stage 1:** Disperse carbopol ETD 2020 and Ultrez 10 polymer in the deionized water, Continue stirring slowly to hydrate for about 20 min.

**Stage 2:** Partially neutralize the carbopol dispersion with TEA in Part A and mix until smooth.

**Stage 3:** Add part B to Part A with slow, sweep mixing to avoid foaming.

**Stage 4:** Pre-combine ingredients in part C and add part C to parts A/B. Mix slowly until homogeneous

**Stage 5:** Add ingredients in part D to parts A/B/C, in order mixing thoroughly between. Finish by adding remaining TEA to neutralize.

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

**STORAGE:** Temperature between 5° C - 25° C

FORMULATION TIP	
FOOT SCRUB	
Ingredient	Qty (wt %)
<b>Part A</b>	
1. Deionized water	79.00
2. Carbomer/carbopol Ultrez 10	0.25
3. Acrylates / C10-30 Alkyl Acrylate crosspolymer/Carbopol ETD 2020	0.40
4. Triethanolamine (99%)	0.16
<b>Part B</b>	
1. TEA Lauryl sulfate (40%)/ standapol T	4.00
2. Propylene Glycol	2.50
<b>Part C</b>	
1. Glycerine	2.50
2. Coconut Shell Exfoliator	0.5-2%
3. Propylene Glycol and water and Matricaria ( Chamomilla Recuita) Extract/Actiphyte of Chamomile	0.05
4. Propylene glycol and water and Ivy ( Hedera Helix) Extract /Actiphyte of Ivy	0.05
5. Polymethoxy Bicyclic Oxidilidine/Nuosept C	0.20
<b>Part D</b>	
1. Pumice	10.00
2. D&C No.33 (0.1%)	0.35
3. Triethanolamine(99%)	0.44

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

**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.