

## **FORMULATION OF WALNUT SHELL POWDER 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 manufactures Sprayspheres SE® beads containing 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.

### **WALNUT SHELL POWDER :**

Walnut Shell is natural and biodegradable ingredients. Walnuts are rich in polyunsaturated fatty acids, protein, B-vitamins and minerals like magnesium, manganese and potassium. walnut shells contain lower amounts of the hygroscopic materials and higher amounts of the hydrophobic materials. The chemical composition of walnut shell fibers includes cellulose (23.9%), hemicellulose (22.4%), lignin (50.3%), and ash (3.4%).

### **INCI NAME:**

Walnut Shell Powder (Juglans regia)

### **PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** - Free Flowing granular powder

**Color** - Light brown to dark brown should match the standard

**pH Value (1.0% Slurry)** - Between 5 and 7

**Loss on drying ( 105 C)-** NMT 10 %w/w

**Ash Value-** NMT 10 %w/w

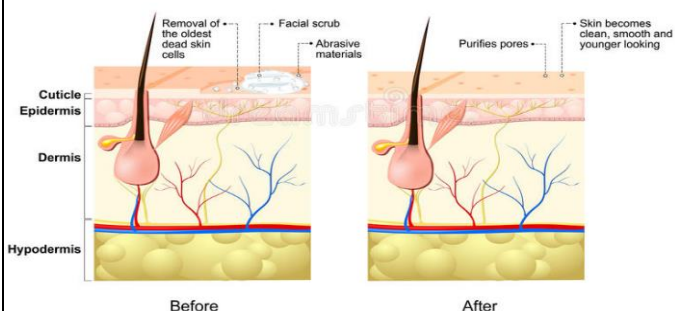
### **KEY PROPERTIES OF WALNUT SHELL POWDER EXFOLIATORS:**

- 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 WALNUT SHELLPOWDER

### EXFOLIATORS IN FACE SCRUB:



Walnut shell powder exfoliators removes skin impurities. It treats the skin problem like acne, ring worms and eczema. Walnut shell powder exfoliator increases the blood circulation and nourishes your skin. It helps retain moisture and prevents toxins from entering. It acts as an antioxidant and reduces the scars also help to prevent the skin damage.

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

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

### 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. Walnut Shell Powder exfoliator are added at the end of manufacturing at moderate temperature and at slow stirring. Shearing or other mechanical stresses should be avoided during all manufacturing and filling process.

### 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	28.8g m	Vehicle
Borax (phase B)	0.7gm	Buffer
Walnut Shell Powder exfoliators	0.5-2	Scrubbing agent

### 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:** Exfoliator Beads, Scrub Beads, Natural Exfoliators, Cosmetic Beads for aesthetic effect, peel off, flake off, shed off, scrap, eliminate.