

## **FORMULATION OF ACTIVATED CHARCOAL 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 remove dull flaky skin, even skin tone and diminish 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.

### **ACTIVATED CHARCOAL:**

Activated charcoal is also called as activated carbon. It is a form of carbon processed to have small, low volume pores that increase the surface area ( $>1000\text{m}^2/\text{g}$ ) also high porosity. It is composed primarily of aromatic configurations of carbon atoms joined by random cross-linkages. Activated Charcoal has various skin properties that make it one of the best natural ingredients for the skin. Activated charcoal is not harsh for the skin.

### **INCI NAME:**

Charcoal Powder (Activated charcoal Powder)

### **PHYSICAL AND CHEMICAL PROPERTIES:**

**Appearance** - Free Flowing black colour spheres

**Solubility** - Practically insoluble in water

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

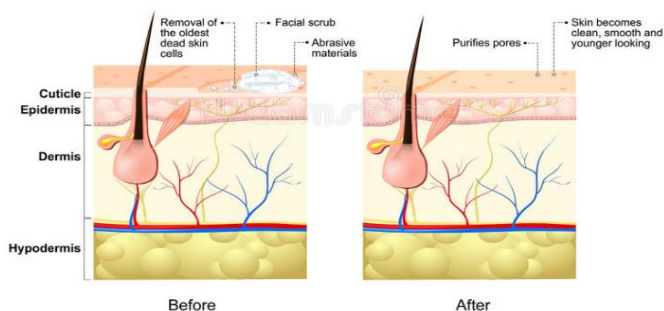
**pH Value (1.0% Slurry)** - 5.0 to 8.0

**Loss on drying** - NMT 8.0%

### **KEY PROPERTIES OF ACTIVATED CHARCOAL 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 ACTIVATED CHARCOAL EXFOLIATIONS IN FACE SCRUB:



Activated charcoal is a gentle exfoliator. It helps lightly clear out dead cells from the surface of the skin. Activated charcoal pull out bacteria, poisons, chemicals, dirt and other micro-particles to the surface of skin it also sucks out impurities of the skin. Activated charcoal help to remove acne scars, dark spots, blemishes and hyperpigmentation. It also helps lighten the skin by gently exfoliating it. Activated Charcoal balances excess oil secretion and closes the open pores.

**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. Activated Charcoal 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.

### 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)	Odor
D.W	28.8g m	Vehicle
Borax (phase B)	0.7gm	Buffer
Activated Charcoal 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.