

FORMULATION OF ACTIVATED CHARCOAL EXFOLIATORS FOR TOOTH PASTE

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 (>1000m²/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

EXFOLIATORS IN TOOTH PASTE:

Activated Charcoal exfoliators help to remove surface stains on the teeth and improve bad breath. It upper-clean the teeth by latching onto bacteria, food residue and stains, and stripping them all from the mouth and the makes the teeth appear whiter. Activated charcoal exfoliators remove accumulated plaque and freshens the breath.

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:

Dissolve Teavigo in glycerin at room temperature with moderate agitation.

Add the Syloblanc 34 with moderate agitation at room temperature until homogeneous mixture is obtained. Add the other ingredients of phase A at room temperature with moderate agitation until a homogeneous mixture is obtained.

Add all ingredients of phase B to phase A in the order shown at room temperature with moderate agitation until a homogeneous paste is obtained.

Mix the ingredients of phase C in the order shown at room temperature with moderate agitation until a clear solution is obtained. Add phase C to phase A/B at room temperature with moderate agitation until a homogeneous paste is obtained. Then add it activated charcoal exfoliator.

FORMULATION TIP	
TOOTH PASTE	
Ingredients	Qty (Wt%)
Phase A	
Glycerol anhydrous (Fluka Chemie)	QS
Teavigo (DSM) (epigallocatechin gallate)	0.10
Syloblanc 34 (Grace Davison) (silica)	7.00
Sodium fluoride	0.22
Sodium saccharin	0.05
Phase B	
Texapon Z 95 P (Cognis GMBH) (sodium lauryl sulfate)	1.60
Syloblanc 81 (Grace Davison) (hydrated silica)	10.00
Syloblanc 82 (Grace Davison) (hydrated silica)	10.00
Titanium dioxide USP	0.50
Optimint 291616 (Symrise) (aroma)	1.10
Phase C	
Citric acid anhydrous	0.45
Water	0.30
Vert Turquoise W 7003 (LCW)	0.00682
FD&C Yellow 5 W 081 (LCW)	0.00114
Activated Charcoal exfoliator	0.5-2

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.