

## FORMULATION OF CELLULOSE EXFOLIATORS IN TEETH POLISHER



**EXFOLIATORS:** Exfoliation is a natural process of healthy skin, where the body sheds dead skin cells, allowing brand-new, fresh skin to be revealed beneath.

Natural Exfoliating agents are used to remove dead cells present on the skin and boost blood circulation, giving renewed and glowing skin. It keeps teeth free from Abrasive agent i.e used to clean teeth and increase their shine, which are also beneficial in keeping the teeth clean and feel fresh all day long with its naturally astringent and mattifying properties.

Umang Pharmatech manufactures **Sprayspheres SE®** beads containing natural products specially used for Exfoliation.

### CELLULOSE EXFOLIATORS

Gentle and mild exfoliants gently polish your teeth and clean bacterial film from your teeth and gums. Natural Exfoliators like Cellulose are responsible for dissolving stains from your teeth.

Cellulose exfoliators in teeth polisher help to remove surface stains on the teeth and improve bad breath. It cleans the teeth by latching onto bacteria, food residue and stains, and stripping them all from the mouth and the makes the teeth appear whiter. Cellulose exfoliators removes accumulated plaque and freshens the breath.

### 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

### 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

- It is natural, non-toxic, non-comedogenic and non-allergenic properties and also biodegradable.
- Does not disappear on gentle rub
- Preservative Free
- Non GMO
- Composition has GRAs status.
- Provides Soft to mild Exfoliation
- Only approved synthetic & natural colors used.

## EFFECT OF CELLULOSE EXFOLIATION IN TEETH POLISHER

Cellulose exfoliators are especially used in cleaning teeth by delicate exfoliation. The cellulose beads/spheres present in this teeth-whitening powder helps in the removal of stains and yellow coating from your teeth. Natural mild exfoliants gently polish your teeth and clean bacterial film from your teeth and gums. Natural Exfoliators like cellulose exfoliators are responsible for dissolving stains from your teeth.

### Formulation Procedure:

**Step I:** 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.

**Step II:** Add the other ingredients of phase A at room temperature with moderate agitation until a homogeneous mixture is obtained.

**Step III:** 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.

Also Cellulose exfoliators are added at the end of manufacturing at slow stirring. Shearing or other mechanical stresses should be avoided during all manufacturing and filling processes.

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

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

**KEY WORDS:** Exfoliate, peel off ,flake off ,throw out, shed off ,scrap, eliminate ,rub , Exfoliators beads , Scrub beads , Natural Exfoliators ,Cosmetic beads for aesthetic effect.

FORMULATION TIP	
TEETH POLISHER	
Ingredients	Qty (%Wt)
<b>Phase A</b>	
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
<b>Phase B</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
<b>Phase C</b>	
Citric acid anhydrous	0.45
Water	0.30
Vert Turquoise W 7003 (LCW)	0.00682
FD&C Yellow 5 W 081 (LCW)	0.00114
Cellulose Exfoliators	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