SORBOSIL AC33/43 CLEANING BOOSTERS FOR TOOTH WHITENING

PQ Corporation’s expertise in particle technology enables the provision of high purity, patented products such as Sorbosil AC33 and AC43. Through the tight control of the particle size and strength, these products deliver exceptional improvements in cleaning performance at very low levels (0.5-5%), by replacing a small percentage of standard abrasive.

Sorbosil AC33 delivers optimum cleaning performance for high RDA pastes (>120 RDA). Sorbosil AC43 delivers optimum cleaning performance for low RDA pastes (70-120 RDA).

BENEFITS OF SORBOSIL CLEANING BOOSTERS:

- High cleaning efficiency across a wide range of RDA values (70-150).
- Replacement of low levels of standard abrasive with the Sorbosil cleaning booster enhances formulation cleaning performance.
- AC43 can be used in clear gels to provide a clear gel whitening toothpaste.
- Easy to use with no regulatory issues or new ingredients listings required.
- Compatible with active ingredients.

IMPROVEMENTS IN CLEANING PERFORMANCE

At 100 brush strokes, PQ Corporation’s cleaning test shows good correlation with clinical tests.

The example shows that replacing a proportion of Sorbosil AC35 with Sorbosil AC33 or AC43 cleaning booster gives significant improvements in cleaning performance.

IMPROVEMENTS IN CLEANING PERFORMANCE – PCR AND RDA TEST

Utilising the industry standard Radioactive Dentine Abrasion (RDA) and Pellicle Cleaning Ratio (PCR) tests shows that replacement of the Sorbosil AC35 with Sorbosil AC33 or AC43 cleaning booster booster also gives improvement in PCR values whilst retaining acceptable RDA values.
Sorbosil BFG and CBT granules are silicas that provide novel visual and sensory effects in dental or skin care formulations. They are ideally suited to providing sensory cues for product differentiation or highlighting performance benefits.

**BENEFITS OF SORBOSIL BFG & CBT GRANULES:**

- **Sensory effects:** Controlled particle strength and size, with a choice of colours, provides for a range of sensory effects in dental and skin care products.

- **Consumer cue:** Controlled breakdown properties of the granules can be used to provide a sensory cue for cleaning or massaging.

- **Low abrasion:** Despite having large particle size, Sorbosil BFG & CBT granules have very low abrasion.

- **Compatibility:** Excellent compatibility with other formulation ingredients and therapeutic agents assures formulation stability.

### SORBOSIL BFG & CBT GRANULES

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorbosil BFG10</td>
<td>Low particle size, non-pigmented silica granule</td>
<td>Provides gentle mouth or skin feel and is suited to clear gel formulations</td>
</tr>
<tr>
<td>Sorbosil BFG50</td>
<td>Non-pigmented, large particle size silica granule</td>
<td>Provides distinct mouthfeel or skin scrub sensation and is suited to clear gel formulations</td>
</tr>
<tr>
<td>Sorbosil BFG51</td>
<td>Blue silica granule</td>
<td>Combines the strong visual impact of blue particles with distinct mouthfeel or skin scrub sensation</td>
</tr>
<tr>
<td>Sorbosil BFG52</td>
<td>Green silica granule</td>
<td>Combines the strong visual impact of green particles with distinct mouthfeel or skin scrub sensation</td>
</tr>
<tr>
<td>Sorbosil BFG54</td>
<td>Red silica granule</td>
<td>Combines the strong visual impact of red particles with distinct mouthfeel or skin scrub sensation</td>
</tr>
<tr>
<td>Sorbosil CBT60S</td>
<td>Non-pigmented silica breakdown agglomerate</td>
<td>Fast breakdown provides mild, tingling sensation. Ideal for facial cleansers &amp; wash formulations for face &amp; body</td>
</tr>
<tr>
<td>Sorbosil CBT70</td>
<td>Non-pigmented silica breakdown agglomerate</td>
<td>Very slow breakdown provides a very strong sensory skin feel. Ideal for body wash products</td>
</tr>
<tr>
<td>Sorbosil BFG100</td>
<td>Non-pigmented silica breakdown agglomerate</td>
<td>Controlled breakdown granule for changing mouthfeel during toothbrushing</td>
</tr>
</tbody>
</table>

**FORMULATING WITH SORBOSIL PRODUCTS**

The sensory impact can be customised by use of different product strengths and sizes. An incorporation level from less than 1% up to 10% delivers the ideal sensory cue. Coloured particles usually deliver required visual impact at incorporation levels of 1% or less. Dual visual and sensory effects can be achieved either by incorporation of coloured and non-coloured products or by combining products of different strength and size.
TECHNICAL SERVICE
PQ Corporation offers a high standard of technical and analytical service to ensure optimum performance of its products. For assistance, contact us via e-mail: techsupport@pqcorp.com

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