Product Description

SUPER-PFLEX® 100 precipitated calcium carbonate (pcc) and SUPER-PFLEX® 200 pcc are surface treated, fine particle size, precipitated calcium carbonates with unique crystal morphologies and very narrow particle size distribution.

SUPER-PFLEX® 100 pcc differs from SUPER-PFLEX® 200 pcc only in the treatment level of stearic acid which has been applied to the base pcc. SUPER-PFLEX® 100 pcc has a typical surface treatment level of 1% while SUPER-PFLEX® 200 pcc has a typical surface treatment level of 2%.

Applications

SUPER-PFLEX® precipitated calcium carbonate is an engineered sub-micron functional filler which imparts improved performance properties to rigid PVC applications. The ultrafine particle size and narrow particle size distribution permit exceptionally high filler loadings without compromising impact development or ductility.

Typical applications include extruded weatherable profiles and substrates, injection molded housings and fittings, and small diameter conduit and pipe.

Additional information on the use SUPER-PFLEX® pcc may be found in the following Technical Papers which are available from Specialty Minerals:

- *Dry Bulk Powder Handling in Plastics Processing*; Barabas and Wiebking
- *Fillers in PVC: A Review of the Basics*; Wiebking

Features

- Controlled particle size architecture
- Sub-micron median particle size
- Process controlled topsize
- Controlled particle size distribution

Advantages

- Increased resin extension
- Improved impact strength
- Improved impact strength
- Consistent quality

Benefits

- Reduced Volume Formulation Cost
- Minimize impact modifier loading
- Minimize impact modifier loading
- Improved product quality, reduced scrap
Typical Properties

Average Particle Size (microns) ................. 0.7
+325 Mesh Residue, (weight percent) ............ 0.03
Specific Gravity ................................. 2.7
Dry Brightness (Hunter Y, Rd value) ............ .97
Bulk Density (pounds/ft³) ....................... 30
(grams/cc) ................................. 0.48
Tap Density (pounds/ft³) ....................... 0.70
(grams/cc) ................................. 1.12
Surface Area (meters²/grams) ............

Chemical Composition
(typical – before treatment)

<table>
<thead>
<tr>
<th>Component</th>
<th>Formula</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Carbonate</td>
<td>CaCO₃</td>
<td>98%</td>
</tr>
<tr>
<td>Magnesium Carbonate</td>
<td>MgCO₃</td>
<td>1%</td>
</tr>
<tr>
<td>Iron as Fe₂O₃</td>
<td>&lt;0.1%</td>
<td></td>
</tr>
<tr>
<td>Moisture H₂O</td>
<td>&lt;0.2%</td>
<td></td>
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</tbody>
</table>

SUPER-PFLEX® is listed under the NSF generic listing program for CaCO₃

Shipping Information

SUPER-PFLEX® 100 pcc and SUPER-PFLEX® 200 pcc ship from Adams, MA.

Product is available in rail bulk, truck bulk, supersack, and 50 lb. bags. For availability and minimum order quantity, contact customer service.

All products are sold on the understanding that the user is solely responsible for determining their suitability for the intended use. All information given and recommendations made herein are based upon our research and are believed to be accurate, but no guarantee, either expressed or implied, is made with respect thereto or with respect to the infringement of any patent. SMI MAKES NO WARRANTY OF MERCHANTABILITY OR SUITABILITY FOR ANY PARTICULAR PURPOSE IN CONNECTION WITH ANY SALE OF THE PRODUCTS DESCRIBED HEREIN. Inconsistent terms and conditions contained in Buyer’s purchase order shall not be binding on SMI/BMI unless reflected in writing signed by SMI/BMI’s representative. This information is not to be copied, used in evidence, released for publication or public distribution without written permission from Specialty Minerals Inc./Barretts Minerals Inc.

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