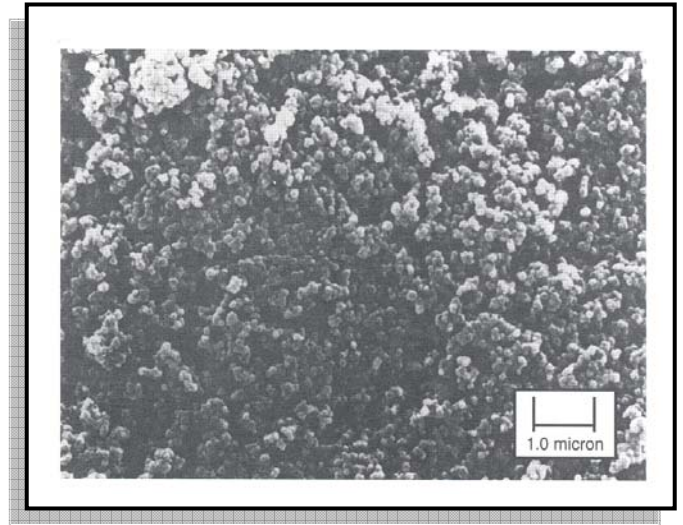


## Product Description

ULTRA-PFLEX<sup>®</sup> precipitated calcium carbonate (pcc) is a surface treated, nano-sized, premium quality pcc with a very narrow particle size distribution combined with a nearly spherical particle geometry. With a median particle size of 70 nanometers, ULTRA-PFLEX<sup>®</sup> pcc is the performance calcium carbonate.



## Applications

ULTRA-PFLEX<sup>®</sup> precipitated calcium carbonate is an engineered nano particle functional filler which imparts improved performance properties to rigid PVC applications. The nano-sized particle size and narrow particle size distribution delivers excellent impact development, extrusion performance, and improved surface appearance.

Typical applications include high value weatherable profiles such as window frames, injection molded parts for decorative applications, and small dimension parts with critical performance requirements.

Additional information on the use of ULTRA-PFLEX<sup>®</sup> pcc may be found in the following Technical Papers which are available from Specialty Minerals:

- *The Effect of Calcium Carbonate Size and Loading Level on the Impact Performance of Rigid PVC Compounds*; Bryant and Wiebking
- *Dry Bulk Powder Handling in Plastics Processing*; Barabas and Wiebking

## Features

- Nano particle size
- Nano particle size
- Process controlled topsize
- Controlled particle size distribution

## Advantages

- Improved impact strength
- Improved surface appearance
- Improved impact strength
- Consistent quality

## Benefits

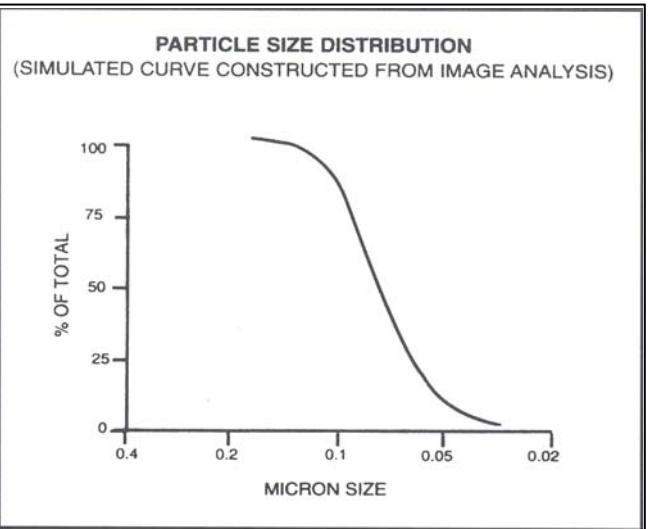
- Minimize impact modifier loading
- Reduced process aid loading
- Minimize impact modifier loading
- Improved product quality, reduced scrap

### Typical Properties

Average Particle Size (microns)	.07
+325 Mesh Residue, (weight percent)	.1
Specific Gravity	2.7
Dry Brightness (Hunter Y, Rd value)	98
Bulk Density (pounds/ft <sup>3</sup> )	15
(grams/cc)	.24
Tap Density (pounds/ft <sup>3</sup> )	30
(grams/cc)	.48
Surface Area (meters <sup>2</sup> /grams)	19

### Chemical Composition (typical – before treatment)

Calcium Carbonate	CaCO <sub>3</sub>	98%
Magnesium Carbonate	MgCO <sub>3</sub>	<0.1%
Iron as	Fe <sub>2</sub> O <sub>3</sub>	<0.1%
Moisture (% weight lost @ 110° C)	H <sub>2</sub> O	<0.2%



### Shipping Information

ULTRA-PFLEX<sup>®</sup> pcc ships 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./BarrettsMineralsInc.

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