Chemical Distributors, Inc.

Tech Technical Data

80 Metcalfe Street
Buffalo, New York 14206
716-856-2300/fax 716-856-7115

# CALCIUM CARBONATE FCC

## GENERAL DESCRIPTION:

Precipitated Calcium Carbonate (PCC) is one product in a family of ultrafine calcium carbonates that have been developed for use in sealants, adhesives, plastics, rubber, inks and other high performance applications. Specialty Minerals ultrafine PCC products range from .07 to .15 microns in average particle size. This product is treated using fatty acid chemistry to improve dispersibility and compatibility in polymers and elastomers.

Specialty Minerals manufactures PCC using stringent quality assurance procedures and good manufacturing practices

## APPLICATIONS:

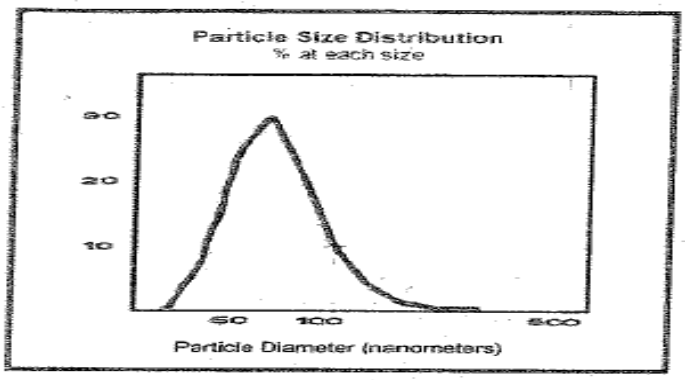
The high surface area and rheological structure building ability of PCC makes it a versatile function filler in many different applications. Its hydrophilic nature makes it particularly suitable for water-based products, but it is also compatible with many polymers and organic solvents.

*** In Brewing applications, Calcium Carbonate may be used as a salt for water adjustment for the purpose of raising pH. Calcium Carbonate is most effective when added directly to the mash due to its limited solubility. It may also be used for making darker beers in areas of soft water. ***

**Typical Physical Properties**

| | |
|---|---|
| Crystal habit | Calcite |
| Particle Shape | Rhombic |
| Particle Size, microns | 0.07 |
| Surface Area, meters$^2$/gram | 19 |
| Oil Absorption, grams oil/100 grams | 26 |
| Tapped Density, grams/cc | 0.43 |
| pounds/ft$^3$ | 26.9 |
| Bulk Density, grams/cc | 0.17 |
| pounds/ft$^3$ | 10.7 |
| Specific Gravity | 2.71 |
| Moisture, % loss at 200° C | 0.7 |
| Residue, 325 mesh screen, % | 0.01 |
| Dry Brightness, Minolta –L | 99 |
| Solubility, in water, pH 7 | Insoluble |
| in acid | Soluble |
| in organic solvents | Insoluble |

*Note:*
*These are typical values, and should not be used to set specifications.*




**Rheology in 20% DINP Paste**

Contraves RM-265 Concentric Cylinder Rheometer
DIN 108 Geometry

| | |
|---|---|
| Apparent Viscosity at 228 s$^{-1}$, Pa·s | 0.93 |
| Yield, Pa | .93 |
| Bingham viscosity, Pa s | 0.57 |

***For more detail about product handling & safety info, please refer to the Material Safety Data Sheet***