

# ViCALity<sup>®</sup> GF (General Formulation)

USP / FCC Ground Calcium Carbonate (GCC)

## ViCALity<sup>®</sup> GF Ground Calcium Carbonate:

ViCALity<sup>®</sup> GF Ground Calcium Carbonate (GCC) is a fine ground, low lead calcium carbonate. The product is available in a range of particle sizes including 4 micron, 6 micron, 10 micron and 12 micron. Containing less than 300 ppb lead, ViCALity<sup>®</sup> GF GCC is suitable for many applications that must meet the lead requirements of California Proposition 65.

ViCALity<sup>®</sup> GF GCC meets and exceeds the requirements for Calcium Carbonate of the United States Pharmacopeia and the Food Chemicals

Codex. ViCALity<sup>®</sup> GF GCC is Kosher. Calcium carbonate is Affirmed GRAS (Generally Recognized As Safe) by the US FDA (21 CFR184.1191) with no limitations other than good manufacturing practices. This allows the use of calcium carbonate as both a direct and indirect food additive. ViCALity<sup>®</sup> GF GCC is manufactured in the Specialty Minerals plant in Wellsville, OH under stringent quality assurance procedures and Good Manufacturing Practices.

The Wellsville, OH is registered with the US FDA as a Drug Establishment.

## Characteristics:

- Less than 300 ppb lead
  - Good for most CA Proposition 65 uses
- High elemental calcium level
  - ~ 40% calcium
- High bioavailability
- All products meet USP & FCC requirements (Can be tested for EP & JP requirements)

## Applications:

- Cereals
- Snack bars, energy bars, meal replacement
- Baked goods
  - Breads, crackers, cookies, pancakes
- Snack foods
- Flour and pasta enrichment
- Dry food mixes
- Chewable tablets
- Nutritional supplements

Typical Physical Properties	ViCALity <sup>®</sup> GF4	ViCALity <sup>®</sup> GF6	ViCALity <sup>®</sup> GF10	ViCALity <sup>®</sup> GF12 *
Median Particle Size (microns)	4	6	10	12
Bulk Density (grams/cc)	0.75	0.99	1.05	1.05
Tap Density (pounds /ft <sup>3</sup> )	87	91	97	100
(grams/cc)	1.40	1.45	1.55	1.60
Dry Brightness (Hunter Y, Rd value)	92	92	89	87
Lead, parts per billion	<300	<300	<300	<300
Moisture (% wt. Loss @ 110° C)	<0.3	<0.3	<0.3	<0.3
pH	9.8	9.8	9.8	9.8
Specific Gravity	2.7	2.7	2.7	2.7
Oil Absorption (gm oil/100 gm filler)	16	16	15.5	15.5

\* Preliminary data

**US Pharmacopeia and Food Chemical Codex  
Requirements for Calcium Carbonate**

	<b>USP</b>	<b>FCC</b>
Calcium Carbonate	> 98%	> 98%
Magnesium & Alkali Salts	< 1.0%	< 1.0%
Acid Insolubles	< 0.2%	< 0.2%
Loss on Drying	< 2.0%	< 2.0%
Lead	< 3 ppm	< 3 ppm
Arsenic	< 3 ppm	< 3 ppm
Fluoride	< 0.005%	< 0.005%
Heavy Metals (as Pb)	< 0.002%	N/A
Barium	Negative	Negative
Iron	< 0.1%	N/A
Mercury	< 0.5 ppm	N/A

**Packaging:**

ViCALity® GF GCC product is packaged in 50 pound, two-ply kraft bags. The standard shipping unit is a pallet of 50 bags, a total of 2,500 pounds. Pallets include slipsheets and shrinkwrap.

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