

# Industry Application Guide

## Industrial Minerals for Modern Manufacturing

*Shikhar Microns - Excellence in Mineral Solutions*

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## 1. Paint & Coatings Industry

### *Calcite Powder Applications:*

- Interior Paints: Provides exceptional brightness and opacity
- Exterior Paints: Offers weather resistance and durability
- Automotive Coatings: Ensures smooth finish and UV protection
- Industrial Coatings: Delivers consistent performance and cost-effectiveness

### *Recommended Specifications:*

- Interior Paints: 400-500 mesh (38-25 microns)
- Exterior Paints: 270-400 mesh (53-38 microns)

- Automotive: 635-800 mesh (20-15 microns)
- Industrial: 200-325 mesh (74-44 microns)

## **2. Plastic & Polymer Industry**

### ***Coated Calcite Powder Applications:***

- Injection Molding: Improves flow properties and surface finish
- Extrusion: Reduces die swell and enhances dimensional stability
- Blow Molding: Provides parison stability and wall thickness control
- Film Production: Ensures uniform thickness and clarity

### ***Coated Dolomite Powder Applications:***

- PVC Applications: Superior moisture resistance and thermal stability
- Engineering Plastics: Enhanced mechanical properties
- Automotive Parts: Improved impact resistance and durability

### ***Processing Benefits:***

- 20-30% faster processing cycles
- 15-25% lower processing temperatures
- Reduced equipment wear and tear
- Better batch-to-batch consistency

## **3. Construction & Building Materials**

### ***Dolomite Powder Applications:***

- Concrete Production: Enhances strength and durability
- Mortar Mixes: Improves workability and bonding
- Ceramic Tiles: Provides dimensional stability
- Adhesives: Ensures proper viscosity and setting

### ***Calcite Powder Applications:***

- White Cement: Provides brightness and whiteness
- Decorative Applications: Ensures consistent color
- Specialty Mortars: Improves finish quality

### ***Recommended Specifications:***

- Concrete: 100-270 mesh (149-53 microns)
- Mortar: 200-325 mesh (74-44 microns)
- Ceramics: 400-500 mesh (38-25 microns)
- Adhesives: 635-1000 mesh (20-10 microns)

## **4. Paper & Pulp Industry**

### ***Calcite Powder Applications:***

- Printing Paper: Provides opacity and smoothness
- Coated Paper: Ensures uniform coating distribution
- Specialty Papers: Delivers consistent quality
- Packaging Materials: Improves strength and appearance

### ***Recommended Specifications:***

- Printing Paper: 800-1500 mesh (15-5 microns)
- Coated Paper: 635-800 mesh (20-15 microns)
- Specialty Papers: 1000-1500 mesh (10-5 microns)

## **5. Glass Manufacturing**

### ***Dolomite Powder Applications:***

- Container Glass: Provides chemical stability
- Flat Glass: Ensures clarity and durability
- Specialty Glass: Delivers specific properties

- Fiberglass: Improves strength and processing

***Benefits:***

- Enhanced chemical resistance
- Improved thermal stability
- Better processing characteristics
- Cost-effective raw material

***Recommended Specifications:***

- Container Glass: 100-200 mesh (149-74 microns)
- Flat Glass: 200-325 mesh (74-44 microns)
- Specialty Glass: 325-500 mesh (44-25 microns)

## **6. Rubber Industry**

***Calcite Powder Applications:***

- Tire Manufacturing: Improves tread wear and rolling resistance
- Rubber Compounds: Enhances mechanical properties
- Seals & Gaskets: Provides dimensional stability
- Footwear: Ensures comfort and durability

***Benefits:***

- Improved tensile strength
- Enhanced tear resistance
- Better processing characteristics
- Cost-effective reinforcement

***Recommended Specifications:***

- Tires: 200-400 mesh (74-38 microns)
- Compounds: 400-500 mesh (38-25 microns)
- Seals: 500-800 mesh (25-15 microns)

## 7. Detergent & Soap Industry

### ***Calcite Powder Applications:***

- Laundry Detergents: Provides cleaning efficiency
- Dishwashing Products: Ensures gentle cleaning
- Industrial Cleaners: Delivers effective cleaning power
- Personal Care: Provides mild abrasion

### ***Benefits:***

- High brightness for product appeal
- Controlled particle size for effectiveness
- Chemical stability in formulations
- Cost-effective cleaning agent

### ***Recommended Specifications:***

- Laundry: 200-400 mesh (74-38 microns)
- Dishwashing: 400-500 mesh (38-25 microns)
- Industrial: 100-200 mesh (149-74 microns)

## 8. Ceramics & Tiles

### ***Dolomite Powder Applications:***

- Ceramic Tiles: Provides strength and dimensional stability
- Sanitaryware: Ensures durability and finish
- Tableware: Delivers consistent quality
- Technical Ceramics: Provides specific properties

### ***Benefits:***

- Enhanced mechanical strength

- Improved thermal shock resistance
- Better firing characteristics
- Cost-effective raw material

#### ***Recommended Specifications:***

- Tiles: 200-400 mesh (74-38 microns)
- Sanitaryware: 400-500 mesh (38-25 microns)
- Tableware: 500-800 mesh (25-15 microns)

## **9. Adhesives & Sealants**

#### ***Coated Calcite Powder Applications:***

- Construction Adhesives: Provides bonding strength
- Automotive Sealants: Ensures durability
- Industrial Adhesives: Delivers performance
- Consumer Products: Provides user-friendly properties

#### ***Benefits:***

- Improved adhesion properties
- Enhanced moisture resistance
- Better processing characteristics
- Superior mechanical properties

#### ***Recommended Specifications:***

- Construction: 200-400 mesh (74-38 microns)
- Automotive: 400-500 mesh (38-25 microns)
- Industrial: 500-800 mesh (25-15 microns)

## **10. Textile Industry**

#### ***Calcite Powder Applications:***

- Textile Fillers: Provides weight and body
- Coating Applications: Ensures uniform coverage
- Printing Pastes: Delivers consistent results
- Finishing Treatments: Provides specific properties

### ***Benefits:***

- High brightness for product appeal
- Controlled particle size for effectiveness
- Chemical stability in formulations
- Cost-effective filler solution

### ***Recommended Specifications:***

- Fillers: 200-400 mesh (74-38 microns)
- Coatings: 400-500 mesh (38-25 microns)
- Printing: 500-800 mesh (25-15 microns)

This industry application guide is provided by Shikhar Microns to help you understand the diverse applications of our mineral products. For specific technical requirements and custom solutions, please contact our technical team.

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