



Ferroelectric material

# Barium Titanate

## FEATURES

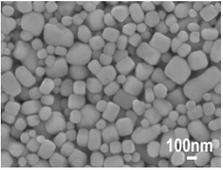
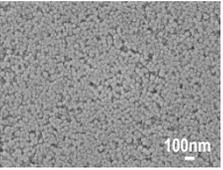
TODA KOGYO's barium titanate, characterized by fine and sharp particle size distribution, is a ferroelectric material produced by our wet synthesis technology. It is suitable as a raw material for multilayer ceramic capacitor, etc., for its high dielectric constant characteristics.

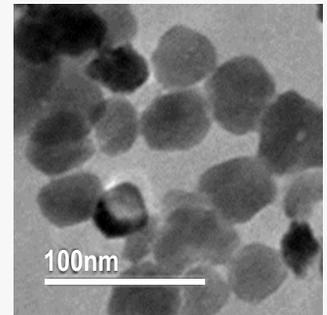
## CHARACTERISTICS

- 1 **Various particle sizes to meet your needs**  
It is available to supply the wide variety of primary particle size from 10 to 150nm.
- 2 **Uniform particle size distribution and particle shape**  
It has very sharp particle size distribution and small variation in particle shape.
- 3 **High dispersibility**  
The slurry of fine particles can be produced due to the excellent dispersibility.

## SPECIFICATIONS

[Powder Products]

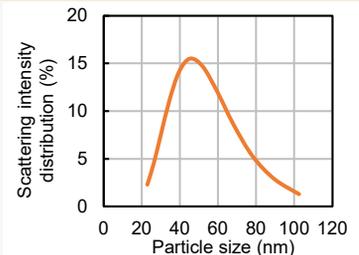
Grade	High dielectric grade	High dispersibility grade
Particle size	80~150nm	30~100nm
Characteristic	High dielectric constant	Narrow particle size distribution
SEM image		



[TEM of High Dispersibility Grade]

### The characteristics of slurry product

- ✓ Containing fine particles of barium titanate.
- ✓ Possible to design a dispersion according to a desired solvent.
- ✓ Possible to prepare highly concentrated dispersion (~60wt%).
- ✓ Narrow particle size distribution.



[Typical Particle Size Distribution of Slurry]

## APPLICATIONS

- Materials for MLCC (For dielectric layer, Co-material of electrode layer).
- High performance resin filler (High dielectric constant, Transmittance and refractive index).
- Materials for piezoelectric devices.

