



Sodium Bentonite
Air Classified
USP/NF & CTFA

Revised: 04/27/2009

VOLCLAY[®] NF-BC

General Description: High purity air-classified sodium bentonite, selectively mined, consisting of micronized particles and supplied as a free-flowing powder.

Functional Use: Suspending agent, viscosifier, binder and emulsion stabilizer for cosmetics, Pharmaceuticals and personal care products. Specifically used when darker color is desired for formulations.

Purity: This mineral is specially processed to control both purity and performance. Volclay NF-BC meets all requirements set forth by the USPXXIII/NFXVIII for Bentonite.

Microbial Limits Plate Count: Aerobic microbial plate count does not exceed 100 cfu/g. No presence of E. coli, S. aureus, Salmonella sp. or P. aeruginosa.

Solubility: Insoluble in water or alcohol; one gram of clay produces a surface area greater than 750 sq. meters when fully dispersed.

Gel Formation:	Max 2 mls	Texture:	Soft, slippery
Moisture:	8% maximum as shipped	Odor:	None
Viscosity:	8-30 cps. (at 6.25% Fann)	Taste:	None
Density:	2.6 g/cm ³	Color:	Gray to Tan
Swelling Power:	Minimum 24 mls	pH:	2% dispersion 8.5-10.5

Dry Particle Size: Minimum 99.00% finer than 200 mesh (74 microns)

Wet Particle Size: Minimum 99.75% finer than 200 mesh (74 microns)
 Minimum 99.00% finer than 325 mesh (44 microns)

Elemental Analysis: Typical values listed are not to be construed as rigid specifications.

SiO ₂	69.56%
Al ₂ O ₃	20.69%
MgO	2.70%
Fe ₂ O ₃	4.85%
CaO	1.30%
Na ₂ O	2.43%
K ₂ O	0.30%
LOI	9.80%

All metals are expressed as oxides, which are complexed in the mineral.

Packaging: 4-ply poly-lined package in boxes, moisture resistant, 50 pound net.