



VOLCLAY® NF-BC

General Description:

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

Functional Use:

Suspending agent, viscosifier, binder and emulsion stabilizer for cosmetics, pharmaceuticals 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 current USP/NF monograph for Bentonite.

Solubility:

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

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).

<u>Test Description</u>	<u>Specification</u>	<u>Method</u>
pH (2% solids)	9.5 – 10.5	TP-6503
Viscosity (6.25% solids)	8 – 30 cps	TP-1022
L.O.D.	5.0 – 8.0%	TP-6507
Free Swell	24 mls min	TP-6514
Gel Formation	2 mls max	TP-6506
Fineness of Powder	No grit felt	Current USP/NF
I.D. Glycol Oriented	15.0 – 17.2 A	Current USP/NF
I.D. Random Powder	1.492 – 1.504 A	Current USP/NF
Arsenic	5 ppm max	ASG-CWC-SW006/ASG-ICP-103
Lead	40 ppm max	ASG-CWC-SW006/ASG-ICP-103

Microbial Limits

Aerobic Place Count	<10 CFU/g	USP <61/62>
Yeast & Mold	<10 CFU/g	USP <61/62>
P. aeruginosa	Negative / 10g	USP <61/62>
S. aureus	Negative / 10g	USP <61/62>
E. coli	Negative / 10g	USP <61/62>
Salmonella	Negative / 10g	USP <61/62>
Gram Negatives	Negative / 10g	USP <61/62>

Packaging:

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

Elemental

Typical values listed are not to be considered as rigid specifications.

Composition:

SiO ₂	69.56%	CaO	1.30%	All metals are expressed as oxides which are complexed in the mineral.
Al ₂ O ₃	20.69%	Na ₂ O	2.43%	
MgO	2.70%	K ₂ O	0.30%	
Fe ₂ O ₃	4.85%	LOI	9.80%	

