



TECHNICAL INFORMATION

BIG HORN® 22

Description: **BIG HORN® 22** is a specially sized pure sodium bentonite for use in binding, sealing, absorbing and general applications.

Typical Characteristics:	Bulk Density (lbs/ft³):	63 ± 3
	Cation Exchange Capacity (CEC meq(100gm):	70 – 90
	Color:	Light Grey to Tan
	Free Swell (cc/2gm):	20 ± 4
	Moisture Content (%):	6 - 12
	pH:	9.1 ± 0.4
	Resistivity (ohm-meters):	2.40
	Specific Gravity:	2.55 ± 0.1
	Thermal Conductivity (Btu/hr-ft-°F):	Dry – 0.20 Saturated – 0.50
	Wet Screen Analysis (% Residue on #200 Sieve):	3.0 ± 0.5

Typical Sieve Analysis:

Sieve Size	% Retained
#8	0.25
#12	21.14
#20	65.80
#30	12.73
Pan	0.08

Typical Chemical Analysis:	%
SiO ₂	60.34
Al ₂ O ₃	19.28
Fe ₂ O ₃	3.48
Na ₂ O	2.34
TiO ₂	.22
CaO	.38
MgO	1.67
K ₂ O	.10
H ₂ O	7.75
Other	.07
L.O.I.	4.37

E.P.A Toxicity Analysis:	E.P.A Standard (ppm)	Typical Analysis (ppm)
Arsenic	5.0	<0.1
Barium	100.0	0.5
Cadmium	1.0	<0.05
Chromium	5.0	<0.1
Lead	5.0	<0.1
Mercury	0.2	<0.02
Selenium	1.0	<0.05
Silver	5.0	<0.1

Rev 3/17