

## PRODUCT DATA SHEET

### NM-Ca \*Winston Clinoptilolite Potassium Aluminosilicate, Natural Clinoptilolite Zeolite Powder and Granules

#### TYPICAL PROPERTIES

Form	Granules & Powders
Color	White (85 optical reflectance)
Pore Diameter	4.0 Angstroms
Pore Volume	15%
Specific Surface Area	15 m <sup>2</sup> /g
Surface Charge Density	10.1 E-23 meq/A <sup>2</sup>
Bulk Density (granules & powders)	44 - 53 lbs/ft <sup>3</sup>
pH Stability	3 - 101,603 kg/m <sup>3</sup>
Swelling Index	nil
Thermal Stability	1,202 °F 650 °C
Ion Exchange Capacity	0.8 – 1.2 meq/g

#### TYPICAL CHEMICAL ANALYSIS

SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	CaO	MgO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
64.9	11.9	1.6	3.4	1.4	0.3	3.2	>0.05

#### MAJOR EXCHANGEABLE CATIONS

Rb <sup>+</sup>	Na <sup>+</sup>	Ba <sup>+2</sup>	Mg <sup>+2</sup>	Li <sup>+</sup>	Ag <sup>+</sup>	Sr <sup>+2</sup>	Fe <sup>+3</sup>	K <sup>+</sup>	Cd <sup>+2</sup>
Cu <sup>+2</sup>	Co <sup>+3</sup>	Cs <sup>+</sup>	Pb <sup>+2</sup>	Ca <sup>+2</sup>	Al <sup>+3</sup>	NH <sup>+4</sup>	Zn <sup>+2</sup>	Hg <sup>+2</sup>	Cr <sup>+3</sup>

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