Ida-Ore Mining, LLC
Clinoptilolite Zeolite

Available Mesh Sizes:

US Standard Sieve	Ida Ore Terminology	Inches	Millimeters
325 -	Ultra Fine	44 micron	
40 -	Powder	400 micron	.416mm down to .038mm
20 - 50	Small	.033” down to .011”	.84mm down to .28mm
14 - 40	Sand	.0555" down to .0164"	1.18mm down to .416mm
7 - 14	Medium	.11" down to .0555"	2.8mm down to 1.18mm
3 - 7	Large	.25" down to .11"	6.3mm down to 2.8mm

Specs

Total Surface Area	< 800 m^2/g
Specific Surface Area	1357 yd^2/oz
Average Clinoptilolite Content	87% (+/- 5%)
Specific Gravity	2.42
Ph	7.29
Bulk Density	~ 55 lbs/ft^3 depending on screening size

Elemental Breakdown

Ida-Ore Zeolite Mining sources its Clinoptilolite Zeolite from an area called the Sheaville deposit along the Idaho and Oregon border. The tests that have been done on this deposit have all shown numbers close to these. Tests can vary slightly from different sample sites.

$(Na,K,Ca)_6(Si, Al)_{36}O_{72}•20H_2O$

Element	Formula	Percentage
Silica Oxide	SiO_2	71.5%
Aluminum Oxide	AL_2O_3	11.3%
Potassium Oxide	K_2O	4.55%
Ferric Oxide	Fe_2O_3	2.05%
Sodium Oxide	Na_20	1.24%
Calcium Oxide	CaO	1.22%
Titanium Oxide	TiO_2	0.27%
Magnesium Oxide	Mg0	0.17
Barium Oxide	BaO	0.15%

Analysis performed by The Mineral Lab, Inc.

Elements most important for CEC of 147-250 meq/100g

Element	Percentage
Potassium Oxide	4.55%
Sodium Oxide	1.24%
Calcium Oxide	1.22%
Magnesium Oxide	0.17%

Selectivity

Compounds:	$Cs^+ > NH_4^+ > Pb^{2+} > K^+ > Na^+ > Ca^{2+} > Mg^{2+} > Cu^{2+} > Zn^{2+}$
Gases:	Co, Co_2, So_2, H_2S, Nh_3, HcHo, Ar, O_2, N_2, H_2O, He, H_2, Kr, Xe, Ch_2Oh, freon
Major Exchangeable:	Rb, Li, K, Cs, NH_4, Na, Ca, Ag, Cd, Pb, Zn, Ba, Sr, Cu, Hg, Mg, Fe, Co, Al, Cr