

Zeolite Clinoptilolite Powder

Formula: $(\text{Ca}, \text{K}_2, \text{Na}_2, \text{Mg})_4\text{Al}_8\text{Si}_{40}\text{O}_{96} \cdot 24\text{H}_2\text{O}$

- ◆ Clinoptilolite content: 90-92%
- ◆ TBA - Tribo-mechanical pulverized: <20 µm,
- ◆ TBA activated for increased effectiveness
- ◆ Very high cation exchange capacity
- ◆ 100% natural product, without any additives
- ◆ Pharmacy packaging material / (BPA) FREE
- ◆ Country of origin: Norway
- ◆ Color: gray-green



Quantity: 250g (0,55lb)

CAS-Nr.: 12173-10-3

EAN: 3830069050039

Activated zeolite

Our zeolite is activated with high temperature. It is heated at temperatures around 450 degree C / 842 degree F for several hours to eliminate the crystalline water inside the zeolite-structure. Activation increases the Zeolites capability for detox.

Mineralogical composition:

Clinoptilolite 90-92%, Feldspar 2-4%

Cristobalite 5-7%, Mica 1-2%

Chemical composition:

SiO₂ 65.0 to 71.3%

Al₂O₃ 11.5 to 13.1%

CaO 2.7 to 5.2%

K₂O 2.2 to 3.4%

Fe₂O₃ 0.7 to 1.9%

MgO 0.6 to 1.2%

Na₂O 0.2 to 1.3%

TiO₂ 0.1 to 0.3%

Additional analysis of trace elements:

Co <3 ppm

Cu 3 ppm

Sn <1 ppm

Pb 10 ppm

As 0.8 ppm

Cd <0.1 ppm



Quantity: 454g (1lb)

CAS-Nr.: 12173-10-3

UPC: 707273664372

Zeolite Clinoptilolite Powder 3xTBA

Formula: $(\text{Ca}, \text{K}_2, \text{Na}_2, \text{Mg})_4\text{Al}_8\text{Si}_{40}\text{O}_{96} \cdot 24\text{H}_2\text{O}$

- ◆ Clinoptilolite content: 95%
- ◆ 3 x TMA/TBA - Tribo-mechanical pulverized: $<2 \mu\text{m}$,
- ◆ TBA activated for increased effectiveness
- ◆ Very high cation exchange capacity
- ◆ 100% natural product, without any additives
- ◆ Pharmacy packaging material / (BPA) FREE
- ◆ Country of origin: Slovakia
- ◆ Color: gray-green



Quantity: 454g (1lb)

CAS-Nr.: 12173-10-3

EAN: 3830069050305



Quantity: 250g (0.55lb)

CAS-Nr.: 12173-10-3

EAN: 3830069050398

Activated zeolite

Our zeolite is activated with high temperature. It is heated at temperatures around 450 degree C / 842 degree F for several hours to eliminate the crystalline water inside the zeolite-structure. Activation increases the Zeolites capability for detox and consequently binds heavy metals.

Chemical analysis:

AAS-AMA Atomic absorption spectrometry -

Advanced mercury analyzer

AAS-ETA Atomic absorption spectrometry with
electrothermic atomization

AAS-F Atomic absorption spectrometry with
flame atomization

AAS-HG Atomic absorption spectrometry with
hydride generation

AES-ICP Inductive coupled plasma - atomic
emission spectrometry

GA Gravimetric analysis

Test Results

Nº:	1	Sample number	17-025010	Type of sample	Solid materials – industrial products		Chemical analysis
Name of the Sample Clinoptilolite of sedimentary origin - batch: M 281117-1							
Measured quantity / parameter / analyte	Measurement unit	Test result	Uncertainty of measurement	Test method	Limit of Quantification	Methodical prescription	Type of test
Si (as SiO2)	% dry matter	69.83	2 %	AES-ICP	0.05	IP 1.39b	A
Al (as Al2O3)	% dry matter	12.06	4 %	AES-ICP	0.01	IP 1.2b	A
Total Fe (as Fe2O3)	% dry matter	1.33	5 %	AES-ICP	0.01	IP 1.18b	A
Ca (as CaO)	% dry matter	2.91	7 %	AES-ICP	0.01	IP 1.9b	A
Mg (as MgO)	% dry matter	0.72	10 %	AES-ICP	0.01	IP 1.26b	A
Ti (as TiO2)	% dry matter	0.147	15 %	AES-ICP	0.002	IP 1.42b	A
Mn (as MnO)	% dry matter	0.016	10 %	AES-ICP	0.002	IP 1.27b	A
Na (as Na2O)	% dry matter	0.74	7 %	AES-ICP	0.01	IP 1.29b	A
K (as K2O)	% dry matter	3.60	5 %	AES-ICP	0.01	IP 1.24b	A
P (as P2O5)	% dry matter	<0.05	-	AES-ICP	0.05	IP 1.31b	A
Cr (as Cr2O3)	mg/kg dry matter	5	10 %	AES-ICP	5	IP 1.14b	A
Ag	mg/kg dry matter	<0.05	-	AAS-ETA	0.05	IP 1.1a	A
As	mg/kg dry matter	1.02	12 %	AAS-HG	0.10	IP 1.3a	A
Au	mg/kg dry matter	<0.005	-	AAS-ETA	0.005	IP 1.4a	A
Ba	mg/kg dry matter	643.9	8 %	AES-ICP	0.5	IP 1.6b	A
Be	mg/kg dry matter	1.3	16 %	AES-ICP	0.2	IP 1.7b	A
Bi	mg/kg dry matter	0.21	15 %	AAS-HG	0.10	IP 1.8a	A
Cd	mg/kg dry matter	0.03	18 %	AAS-ETA	0.01	IP 1.10a	A
Co	mg/kg dry matter	<0.5	-	AAS-ETA	0.5	IP 1.13a	A
Cs	mg/kg dry matter	7	15 %	AAS-F	1	IP 1.16a	A
Cu	mg/kg dry matter	3.9	8 %	AAS-F	2	IP 1.17a	A
Ga	mg/kg dry matter	11	15 %	AES-ICP	1	IP 1.19b	A
Hg	mg/kg dry matter	0.013	13 %	AAS-AMA	0.002	IP 1.22a	A
Mo	mg/kg dry matter	0.7	24 %	AES-ICP	0.5	IP 1.28b	A
Ni	mg/kg dry matter	1.1	19 %	AAS-ETA	0.5	IP 1.30a	A
Pb	mg/kg dry matter	5.9	12 %	AAS-F	3	IP 1.32a	A
Sb	mg/kg dry matter	<0.2	-	AAS-HG	0.2	IP 1.36a	A
Sc	mg/kg dry matter	3.4	15 %	AES-ICP	0.5	IP 1.21b	A
Sn	mg/kg dry matter	<1	-	AES-ICP	1	IP 1.40b	A
Sr	mg/kg dry matter	212.4	10 %	AES-ICP	5.0	IP 1.37b	A
V	mg/kg dry matter	5	15 %	AES-ICP	5	IP 1.45b	A
W	mg/kg dry matter	<5	-	AES-ICP	5	IP 1.48b	A
Zr	mg/kg dry matter	121	10 %	AES-ICP	1	IP 1.21b	A
Zn	mg/kg dry matter	15	7 %	AAS-F	2	IP 1.49a	A
S (asSO3)	% dry matter	<0.03	-	AES-ICP	0.03	IP 1.35b	A
Loss by ignition (at 950°C)	% dry matter	7.63	10 %	GA	0.02	IP 3.5	A
Moisture	%	2.16	10 %	GA	0.02	IP 5.7	A

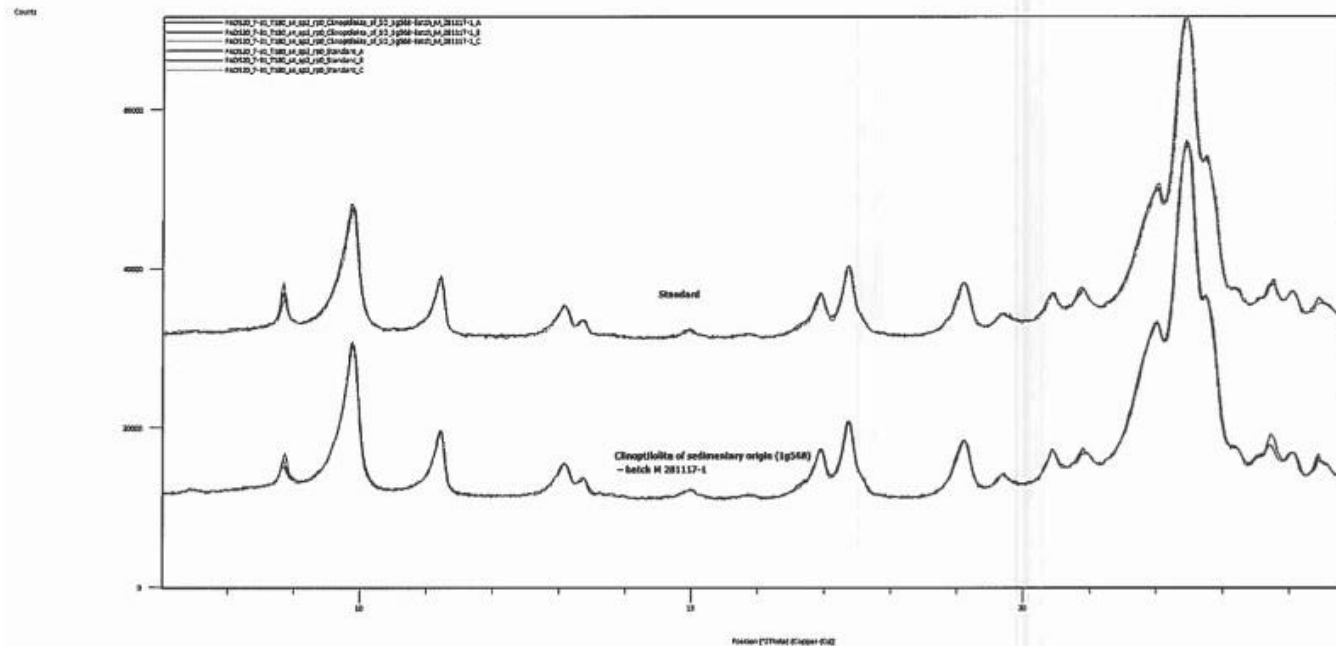


Table 1. Particle size distribution in cumulative form:

Particle size, μm	Cumulative value, %
1,887	100,00
1,690	99,98
1,514	99,91
1,356	99,71
1,215	99,32
1,089	98,67
0,975	97,98
0,874	96,39
0,783	93,69
0,701	88,09
0,628	76,53
0,563	62,57
0,504	48,66
0,451	35,10
0,404	22,77
0,362	12,34
0,325	4,75
0,291	0,00

All the values are approximately 500 nm.
Particle sizes range from 0,3 to 1,9 μm .

Table 2. Characteristic distribution sizes

Sample	Median $x(\mu\text{m})$	Modal $x(\mu\text{m})$	Mean $x(\mu\text{m})$
1	0,512	0,504	0,515
2	0,507	0,504	0,509
3	0,507	0,504	0,510

Table 3. Display of the mean value of distribution of particle sizes in differential form

