



KMI  
ZEOLITE

# FEED & BEDDING

Improved animal health, air quality and regenerative nitrogen use with natural zeolite. *Instructions & application rates.*



United States  
Department of  
Agriculture

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Natural Resources Conservation Service



United States  
Environmental Protection  
Agency

***“Zeolite (i.e., clinoptilolite) has been shown to adsorb nitrogen and reduce ammonia emissions from excreted manure when included as a feed additive.”***

***“Zeolite (is) one type of adsorbent that may chemically interact with ammonium ions to reduce NH<sub>3</sub> emissions from poultry litter or manure.”***

- Agricultural Air Quality Conservation Measures - “Reference Guide for Poultry and Livestock Production Systems” September 2017



Using KMI Zeolite for feed or bedding may qualify you for reimbursement from the EQIP program. Depending on the application and your state, you may be entitled to receive between \$50 and \$400 dollars per 1000 lbs of animal, per year.

Find out more by contacting your local USDA NRCS representative. Here is a locator tool with an interactive map, listing all the local offices available to you.

<https://www.nrcs.usda.gov/programs-initiatives/cig-conservation-innovation-grants#contact>

You can also reach out by telephone: 1-833-ONE-USDA

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## About KMI Zeolite

KMI Zeolite is sourced from the foothills of the Badwater mountain range near Death Valley, CA.

This unique mineral deposit has been in the same family for over 30 years, and KMI Zeolite remains a family owned and operated company.

We have invested in the development of a fully compliant crushing, screening and packaging plant in close proximity to our deposit.

## Our Mineral

Our mineral is Clinoptilolite Zeolite, which is a special type of hydrated sodium aluminosilicate mineral with very open crystalline structure.

Aluminum, silicon and oxygen atoms are arranged in a 3-D framework of channels and cages.

Zeolite does not break down when exposed to stomach acid, or in the digestive tract. Instead it traps contaminants and gases allowing the animal to pass them.

Toxins including aflatoxins and ochratoxins are also absorbed in the digestive process and passed.

In the open environment KMI Zeolite continues to absorb ammonia as nitrogen, hydrogen sulfide many other gasses.

Manure containing zeolite has been shown to mature weeks faster than ordinary during compost.

## Animal Health

Zeolite is the only naturally occurring, negatively charged mineral. A great number of health benefits result from the basic chemistry of the zeolite.

Zeolite can also reduce dicalcium phosphate by up to 50%

When zeolite is included in animal feed it absorbs most of the ammonia generated from the non-protein nitrogen. It acts as a reservoir and slow release mechanism for the nitrogen. This can allow the feeding of up to 4 to 6 times more NPN.

## Stalls & Bedding

Zeolite is also a powerful absorbent and desiccant in stalls and bedding. Moisture and gas is absorbed into the zeolite, and can be swept away.

Zeolite absorbs odors and other gasses while harboring beneficial aerobic bacteria, and reducing anaerobic digestion.

Zeolite absorbs urine and moisture, trapping ammonia and urea as nitrogen.

## Environment

Zeolite reduces the time required for manure to compost, while reducing odors and off-gassing.

Zeolite improves the structure of soil, allowing it to harbor more microbial life while increasing the water and nutrient capacity.

Zeolite reduces noxious odors and gasses during compost by reducing anaerobic activity and absorbing ammonia and hydrogen sulfide.

# Instructions For Use

## ***Feed Additive***

*(Particle size range from 0 - 30 mesh)*

Combine 1-2% KMI Zeolite with dry feed regularly
Keep the zeolite dry until feeding
Blend dry zeolite into feed and serve immediately

## ***Bedding***

*(Particle size range 0 - 8 mesh)*

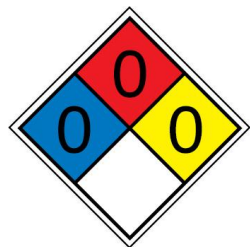
Line stalls with zeolite before adding hay or straw
Spread up to one pound per square foot, or as needed
Re-apply by spreading over existing bedding as needed
Remove saturated and caked zeolite & replace with fresh dry product



# Health & Safety

Clinoptilolite – Natural Zeolite CAS No.  
12173-10-3

- Use in a well ventilated workplace.
- Avoid generating and contacting dust.
- Wear safety glasses.



NFPA Hazard Rating  
(Scale 0 to 4)

HEALTH	0
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	<input type="checkbox"/>

- 4. Severe Hazard
- 3. Serious Hazard
- 2. Moderate Hazard
- 1. Slight Hazard
- 0. Minimal Hazard

HMIS Hazard Rating  
(Scale 0 to 4)

GHS regulations: Not classified as hazardous

CLP regulation: Not classified as hazardous

Directive 67/548/EEC: Not applicable

Directive 1999/45/EC: Not applicable

Regulation (EC) No 1272/2008: Not regulated

Hazard pictogram: Not regulated

Signal word: Not regulated

Hazard determining components: None

Hazard statements: Not regulated



# ZEOLITE AROUND THE FARM

Natural zeolite is a trusted mycotoxin binder in many countries. It works by absorbing a broad spectrum of toxins and carrying them out of the system. It also helps control aflatoxins in animal feed which lowers mortality rates from digestive stress and reduces the need for antibiotics and medicines.

## IMPROVED GROWTH

Improved animal growth and weight gain by increased food conversion rate efficiencies (less feed required per pound of Weight gain)

## DURABILITY

Anticaking / flow agent for feed and increased feed pellet durability

## REDUCES BAD ODOR

Strong affinity for ammonium provides superior odour control

## REDUCED MORTALITY

Reduces the penetration of ammonia into the bloodstream

## HEALTHIER

Reduction of Scours, acidosis, diarrhea, enteritis and other gastrointestinal diseases

## IMPROVED BONE GROWTH

## BETTER PRODUCTS

Improves the value of milk, gradable eggs and the meat index

## MYCO-TOXIN BINDER

Myco-Toxin binder. Zeolite has EU approval for use in the swine and poultry industry. Zeolite is the standard for a mycotoxin binder in many countries and also Europe by absorbing a broad Spectrum of toxins. It also helps control aflatoxins in animal feed which lowers mortality rates from digestive stress and reduces the need for antibiotics and medicines. In Europe antibiotics are not used when using zeolite in feed.

## REDUCES AGGLOMERATION

Improved dispersion of feed ration ingredients by reducing agglomeration

## AMMONIA ABSORBER

Strong affinity for ammonium that aids in digestion and nutrient absorption in Ruminant animals.

