

# ZAR-MIN Feed Additive

## Material Safety Data Sheet



### 1: Chemical Product and Company Identification

*Product description:* Natural zeolite, Clinoptilolite, Sodium aluminosilicate  
*Product name:* ZAR-MIN  
*Company:* ZEO, Inc.  
PO Box 2353 (Mailing) Phone: 972-542-0053  
2104 Augusta (Physical) Fax: 972-542-0211  
McKinney, TX 75070 Website: [www.zeoinc.com](http://www.zeoinc.com)

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### 2: Hazard Identification

*Overview:* May cause irritation to respiratory tract, eyes and skin. Noncombustible.  
*Eye contact:* May cause scratching or mild irritation to the eye.  
*Skin contact:* May cause irritation to the skin.  
*Inhalation:* May cause respiratory irritation.  
*Ingestion:* No hazards known.  
*Chronic hazards:* No known hazards.  
*Physical hazards:* No known hazards.  
*Carcinogenicity listing:* NPT: not listed; IRAC Monographs: not listed; OSHA Regulated: not listed.

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### 3: Composition, Information, or Ingredients

<i>Chemical and common name</i>	<i>Wt. %</i>	<i>CAS Registry</i>	<i>EINECS</i>	<i>OSHA PEL</i>	<i>ACHIH TLV</i>
Zeolite	90-97	1318-02-1	215-283-8	15 mg/m <sup>3</sup> total dust	10 mg/m <sup>3</sup> total dust
or (clinoptilolite <sup>1</sup> )		(12173-10-3)	(Not found)	5 mg/m <sup>3</sup> respirable	3 mg/m <sup>3</sup> respirable
Water	3-10	7732-18-5	231-791-2		

Clinoptilolite is one of the many crystal forms of zeolites

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### 4. First Aid Measures

*Eye:* In case of contact, immediately flush with water for 15 minutes.  
Get medical attention if irritation persists.  
*Skin:* In case of contact and irritation results, flush skin with water.  
Remove contaminated clothing. Get medical attention if irritation persists.  
*Inhalation:* Move to fresh air. If breathing stops, give artificial respiration.  
If breathing is difficult, give oxygen. Get medical attention.  
*Ingestion:* Not applicable

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### 5. Fire-Fighting Measure

<i>Flammable limits:</i>	Noncombustible
<i>Extinguishing media:</i>	Compatible with all extinguishing media
<i>Unusual hazards:</i>	None

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## 6. Accidental Release Measures

<i>Environmental hazard:</i>	None known.
<i>Protection equipment:</i>	Safety goggles, gloves, and protective clothing
<i>Spills cleanup:</i>	Shovel or sweep up and place in a suitable container . Avoid generating dust.
<i>CERCLA RQ:</i>	None. Notification of state and local authorities is recommended.

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## 7. Handling and Storage

<i>Handling:</i>	Avoid contact with eyes, skin, and clothing. Avoid generating and breathing dust. Clean up spills.
<i>Storage:</i>	Keep storage containers closed and dry.

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## 8. Exposure Controls and Personal Protection

<i>Engineering controls:</i>	Use adequate ventilation. Safety shower and eyewash fountain should be within direct access.
<i>Respiratory protection:</i>	Use NIOSH approved dust respirator where dust occurs. Refer to 29 CFR §1910.134 or European Standard 149.
<i>Eye protection</i>	Wear safety goggles
<i>Skin protection</i>	Wear body protecting clothing and gloves. Refer to 29 CFR §1910.133 or European Standard EN 149

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## 9. Physical and Chemical Properties

<i>Appearance</i>	Off white to light green solid (powders and granules)
<i>Odor</i>	Odorless
<i>pH</i>	6.8 – 8.0 (water dispersion)
<i>Bulk density</i>	45 - 85 pounds/ft <sup>3</sup> (0.7 – 1.4 g/ml)
<i>Solubility in water</i>	Insoluble
<i>Flash Point</i>	Not applicable
<i>Autoignition temperature</i>	Not applicable
<i>Flammable limits</i>	Not applicable
<i>Vapor density</i>	Not applicable
<i>Evaporation rate</i>	Not applicable

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## 10. Stability and Reactivity

<i>Stability</i>	Stable
<i>Condition to avoid</i>	None
<i>Materials to avoid</i>	Strong acids and strong bases
<i>Hazardous decomposition:</i>	None

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### 11. Toxicological Information

<i>LD<sub>50</sub> and LC<sub>50</sub></i>	Not established
<i>Carcinogenicity</i>	Clinoptilolite with a particle size in the respirable range was tested for carcinogenicity in rats by intratracheal instillation. No significant increase in the incidence of tumors was found.

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### 12. Ecological Information

<i>Environmental fate</i>	Does not bioaccumulate in animal or plants
<i>Physical/Chemical</i>	Sinks in water
<i>Atmospheric</i>	Contains no ozone depleting substances
<i>Waterfowl toxicity</i>	None known
<i>Aquatic toxicity</i>	None known
<i>BOD and COD</i>	None known

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### 13. Disposal Consideration

<i>Classification</i>	Not a RCRA Hazardous Waste
<i>Disposal method</i>	Dispose in accordance with federal, state (provincial), and local regulations.

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### 14. Transportation Information

<i>Proper shipping name:</i>	Non-Hazardous for Transport
<i>IATA Hazard Class:</i>	Not Regulated
<i>DOT Hazard Class:</i>	Not Regulated
<i>IMDG Hazard Class:</i>	Not Regulated
<i>RID/ADR Dangerous Goods:</i>	Not Regulated
<i>Label:</i>	None required
<i>UN TDG Class:</i>	Not Regulated
<i>Hazard Symbol:</i>	None required
<i>Hazard Id Number (HIM):</i>	None

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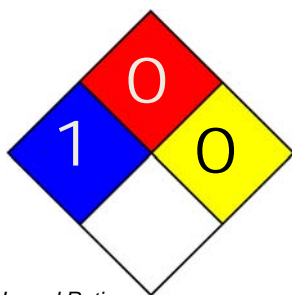
### 15. Regulatory Information

<i>California Prop 65</i>	There is no chemical present known to the State of California to cause cancer or reproductive toxicity.
<i>CPR:</i>	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations. WHMIS Classification: Not controlled
<i>CERCLA:</i>	None
<i>DSL / NDSL</i>	Components of this product identified by CAS Number and listed on the Canadian Ingredient Disclosure List (IDL) are not listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substance List (NDSL), or are otherwise in compliance with the New Substance Notification (NSN) regulations.
<i>EINECS</i>	Components of this product identified by CAS Numbers are on the European Inventory of Existing Commercial Chemical Substances unless indicated as "Not found."
<i>IDL</i>	Components of this product identified by CAS Number and listed on the Canadian

REACH	Ingredient Disclosure List (IDL) are shown in Section 2.
SARA Title III.313f	Natural minerals without chemical modification are exempt.
TSCA	None
VbK:	All components of this product are listed on the U. S. Toxic Substances Control Act Inventory or are exempt from listing, because a Low Volume or Polymer Exemption has been granted in accordance with 40 CFR 723.50.
WGK Water Quality Index:	Not applicable
WHMIS Classification:	ngw
	Not controlled

**16. Other information**

*NFPA Hazard Rating*



*HMIS Hazard Rating*



**PERSONAL PROTECTION E**

Health (Blue)	1	Caution – May be irritating.
Flammability (Red)	0	Non combustible.
Reactivity (Yellow)	0	Not reactive when mixed with water.
Special Info (White)	None	
Health (Blue)	1	Irritation or minor reversible injury possible.
Flammability (Red)	0	Will not burn.
Reactivity (Orange)	0	Will not react, polymerize, decompose, condense, or self react. Non-explosive.
Personal Protection	E	Safety glasses, gloves, and dust respirator.

*Date prepared:* January 4, 2014

*Trade name:* ZAR-MIN is a registered trade name of ZEO, Inc.

The information on this Material Safety Data Sheet is believed to be accurate and is the best information available to ZEO, Inc. This document is intended only as a guide to the appropriate precautions for handling. ZEO, Inc. makes no warranty of merchantability or any other warrant, expressed or implied with respect to the information or the product to which this Material Safety Sheet relates.

Users and handlers of this product should make their own investigations to determine the suitability of the information provided herein for their own purposes.