



PERFORMANCE MINERALS®

**SAFETY DATA SHEET**

SDS DATE: 05/29/2015

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**Availa® Se 4%**

Zinc L-Selenomethionine - Livestock nutritional feed ingredient


Zinpro Corporation  
10400 Viking Drive, Suite 240  
Eden Prairie, MN 55344-7265

GENERAL INFO PHONE: ZINPRO 952-944-2736

EMERGENCY PHONE (Spill, Leak, Fire, Exposure, or Accident): CHEMTREC 1-800-424-9300 (US and Canada)  
1-703-527-3887 (collect calls accepted)  
Reference CCN 725293

**SECTION 2: HAZARD(S) IDENTIFICATION**

**Classification: Acute Oral Toxicity, Category 4** (mixture containing selenium)

<b>Labeling:</b>	<b>Symbol</b>	<b>Exclamation Point</b>
		
	<b>Signal Word</b>	<b>Warning</b>
	<b>Hazard Statement</b>	<b>Harmful if swallowed</b> at packaged concentration. Follow all feeding instructions.
	<b>Precautionary Statements</b>	<b>Wash hands thoroughly after handling this product.</b> <b>Do not eat, drink, or smoke when using this product.</b> <b>Call a Poison Center or seek medical advice if you feel unwell.</b>

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>% WT</u>	<u>EPCRA 313</u>
Zinc L-Selenomethionine	None	4.0% (as Se) 4.0% (as Zn)	Yes Yes
Silicon Dioxide, Amorphous	7631-86-9	1.97%	No
Calcium carbonate	471-34-1	90%	No

**SECTION 4: FIRST AID MEASURES**

**Avoid contact with all workplace chemicals.**

- Eyes:** Wash eyes with copious amounts of water. Consult a physician.
- Skin:** After contact with skin, wash immediately with plenty of water.
- Ingestion:** Wash mouth and throat repeatedly without swallowing. Do not induce vomiting without medical advice. Consult a physician if you feel unwell.
- Inhalation:** Move to fresh air. Provide oxygen or artificial respiration if needed. Consult a physician without delay.

**SECTION 5: FIRE-FIGHTING MEASURES**

**SUITABLE EXTINGUISHING MEDIA:** Dry chemical, CO<sub>2</sub>, water spray, or foam as appropriate for surrounding materials.

**COMBUSTION PRODUCTS:** Burning may produce irritant fumes such as metal oxides, or toxic gases such as carbon monoxide.

**FIRE FIGHTING PROCEDURES:** Self-contained breathing apparatus in enclosed areas. Do not inhale combustion gases. Do not flush into storm drains.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** All granular materials have the potential to create a fire hazard if dust is generated during handling.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**PERSONAL PRECAUTIONS:** Use personal protective equipment including gloves and safety glasses or face shield when handling this product. When handling, do not eat, drink, or smoke.

**ENVIRONMENTAL PRECAUTIONS:** Prevent product from entering drains.

**METHODS FOR CLEANING:** Carefully sweep up and recover uncontaminated material for re-use. Scoop remaining waste into suitable, labeled container for disposal.

**SECTION 7: HANDLING AND STORAGE**

**HANDLING AND STORAGE:** Use only in an area provided with adequate ventilation. Use personal protective equipment when handling this product. Remove and wash contaminated clothing before re-use. Store in tightly closed container at room temperature in a dry location.

**OTHER PRECAUTIONS:** ALWAYS minimize the generation of dust when handling. This product contains metal compounds. Do not mix with acids or oxidizers except under controlled conditions.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

Potential workplace routes of exposure include inadvertent, incidental oral ingestion and inadvertent, incidental dermal contact. Inhalation is not a significant route of exposure.

**EXPOSURE GUIDELINES:**

**U.S. Occupational Safety and Health Administration**

<u>Substance</u>	<u>Permissible Exposure Level</u>
Zinc L-Selenomethionine	None listed
Selenium compounds	0.2 mg/m <sup>3</sup> (TWA)
Zinc dust	10.0 mg/m <sup>3</sup> (TWA)
Zinc dust (respirable fraction)	5.0 mg/m <sup>3</sup> (TWA)
Calcium carbonate (total dust)	15.0 mg/m <sup>3</sup> (TWA)
Calcium carbonate (respirable fraction)	5.0 mg/m <sup>3</sup> (TWA)
Silicon dioxide	6.0 mg/m <sup>3</sup> (TWA)

**ENGINEERING CONTROLS:** Use only in a well-ventilated area to prevent exposure from exceeding regulatory levels.

**RESPIRATORY PROTECTION:** Protection is needed only when dust is formed. Use a mask suitable for dust. Proper handling to minimize dust is required. Do not smoke when handling this product.

**EYE PROTECTION:** Goggles or safety glasses with side-shields.

**SKIN PROTECTION:** Gloves

**WORK HYGIENIC PRACTICES:** Do not eat or drink when handling this product.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE:</b>	Tan granular	<b>SOLUBILITY IN WATER:</b>	Active product is water soluble; Carrier is insoluble
<b>ODOR:</b> odor	Distinctive selenium	<b>PERCENT SOLIDS BY WEIGHT:</b>	100%
<b>PHYSICAL STATE:</b>	Solid	<b>PERCENT VOLATILE:</b>	0%
<b>pH:</b>	NA	<b>VOLATILE ORGANIC CMPDS (VOC):</b>	0%
<b>MELTING POINT:</b>	>200 °C	<b>FLAMMABLE LIMITS IN AIR (% BY VOLUME) UPPER:</b>	NA
<b>SPECIFIC GRAVITY (H<sub>2</sub>O=1):</b>	1.1-1.2 at 20°C	<b>LOWER:</b>	NA
		<b>FLASH POINT:</b>	>200 °C
		<b>AUTOIGNITION TEMPERATURE:</b>	>200 °C

**SECTION 10: STABILITY AND REACTIVITY**

**STABILITY:** This product is stable under recommended storage conditions and in normal use.

**CONDITIONS TO AVOID (STABILITY):** Avoid generation of dust while handling. As with all dusts, particularly those containing metals, finely divided airborne material may explode or burn when exposed to a source of ignition.

**INCOMPATIBILITY (MATERIALS TO AVOID):** Organic and metallic compounds are incompatible with acids and strong oxidizers. Potentially violent reactions may occur on mixing with these materials.

Selenium & silicon ignite in fluorine gas at ordinary temperatures. Mixtures of carbides or chlorates with selenium react with incandescence. Violent or explosive reactions may result if selenium is mixed with chromium trioxide or silver bromate.

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Thermal decomposition may release irritating gases, such as metal oxides, or toxic gases, such as carbon monoxide.

**HAZARDOUS POLYMERIZATION:** None

**SECTION 11: TOXICOLOGICAL INFORMATION**

Essential trace minerals are not a health hazard at low concentrations. This product contains one or more nutritionally-significant metals in organic complexes. The ingredients of this mixture have been evaluated in accordance with the Health Hazard criteria of the Globally Harmonized System of Classification and Labeling of Chemicals.

**Acute Toxicity, Category 4:** Acute toxicity estimate (ATE) for this mixture: LD<sub>50</sub> (oral) = 783 mg/kg  
Acute toxicity data for components:  
L-Selenomethionine, LD<sub>50</sub> (oral, rat): 37.3 mg/kg (Vinson, et al 1987)  
Calcium carbonate, LD<sub>50</sub> (oral, rat): 6,450 mg/kg  
Silicon dioxide, amorphous, LD<sub>50</sub> (oral, rat): >10,000 mg/kg  
Zinc, LD<sub>50</sub> (oral, rat): 630 mg/kg

**Sub acute/Chronic Effects associated with mineral components:**

Skin Sensitizer:	Not Classified
Carcinogenicity:	Not Classified
Mutagen:	Not Classified
Skin Irritant:	Not Classified. Contains selenium and zinc at concentrations less than 10% by weight. May cause skin irritation.
Eye Irritant:	Not Classified. Contains selenium, zinc, and silicon dioxide at concentrations less than 10% by weight. May cause eye irritation.
Reproductive Toxicity:	Not Classified. Contains selenium at a concentration 4% by weight. Adverse reproductive effects have been reported in some animal studies.
Target Organ:	Not Classified
Aspiration toxicity:	Not Classified

**SYMPTOMS OF OVEREXPOSURE to trace minerals:** Irritation or burning of nose, throat, or skin; stomach cramps, nausea, vomiting, diarrhea, behavior changes, deterioration of motor skills.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY OVEREXPOSURE:** Asthma or other respiratory problems, existing dermatitis

**SECTION 12: ECOLOGICAL INFORMATION**

This product contains zinc, selenium, silicon dioxide, and calcium carbonate, all of which are materials that occur naturally throughout the environment, in rocks, soil, and water. Zinc and selenium are essential elements in plants and animals. Inorganic zinc compounds have been used as pesticides, most commonly as an herbicide. Calcium carbonate is used as an herbicide, fungicide, and microbiocide. Amorphous silicon dioxide is used as an insecticide. These uses illustrate that targeted ecological effects of such materials do occur. There is no data regarding the actual eco-toxicity of the metal-amino acid compound in this product, which is formulated and approved for ingestion by livestock.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Wastes containing selenium are hazardous waste in accordance with 40 CFR Part 261 if testing by the Toxic Characteristic Leaching Procedure (TCLP) results in a selenium concentration of 1.0 mg/L or more. This product may be a hazardous waste when disposed because the concentration of selenium as supplied exceeds 0.002%, the Total Selenium threshold at which the TCLP limit cannot be exceeded. It is the responsibility of the generator to identify and properly dispose of all wastes.

**SECTION 14: TRANSPORT INFORMATION**

This product is not listed or categorized as a hazardous material for transport in the U.S. at 49 CFR 172.101.

**SECTION 15: REGULATORY INFORMATION**

Mineral-amino acid complexes are not specifically regulated under any of the listed programs. The metallic component as a free metal or as a metal compound, and other ingredients, are regulated as follows:

**U.S. FEDERAL REGULATIONS**

**TSCA (TOXIC SUBSTANCE CONTROL ACT) listed:** Selenium and selenium compounds  
**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** Selenium particles <0.004 in diameter RQ 100 lb  
**EPCRA (EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT):**  
 302 EXTREMELY HAZARDOUS SUBSTANCE TPQ: Not EHS  
 304 EXTREMELY HAZARDOUS SUBSTANCE RQ: Not EHS  
 311/312 HAZARD CATEGORIES: Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: No  
 313 REPORTABLE INGREDIENTS: Selenium compounds N725 are >1% by weight  
**CLEAN AIR ACT AMENDMENTS Section 112:** Selenium may be subject to regulation as a Hazardous Air Pollutant if emitted to the air.

**U.S. FEDERAL REGULATIONS**

**TSCA (TOXIC SUBSTANCE CONTROL ACT) listed:** Zinc and zinc compounds  
**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** No RQ is assigned, although the class is a CERCLA hazardous substance.  
**EPCRA (EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT):**  
 302 EXTREMELY HAZARDOUS SUBSTANCE TPQ: Not EHS  
 304 EXTREMELY HAZARDOUS SUBSTANCE RQ: Not EHS  
 311/312 HAZARD CATEGORIES: Acute: No Chronic: No Fire: No Pressure: No Reactivity: No  
 313 REPORTABLE INGREDIENTS: Zinc cmpds N987 are >1.0% by weight;  
**CLEAN AIR ACT AMENDMENTS Section 112:** Not listed as Hazardous Air Pollutant in Section 112 of the CAAA.

**U.S. FEDERAL REGULATIONS**

**TSCA (TOXIC SUBSTANCE CONTROL ACT) listed:** Silicon Dioxide, Amorphous (Silica)  
**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** Not listed  
**EPCRA (EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT):**  
 302 EXTREMELY HAZARDOUS SUBSTANCE TPQ: Not EHS  
 304 EXTREMELY HAZARDOUS SUBSTANCE RQ: Not EHS  
 311/312 HAZARD CATEGORIES: Acute: No Chronic: Yes Fire: No Pressure: No Reactivity: No  
 313 REPORTABLE INGREDIENTS: Not listed in Section 313.  
**CLEAN AIR ACT AMENDMENTS Section 112:** Not listed as Hazardous Air Pollutant in Section 112 of the CAAA.

**U.S. FEDERAL REGULATIONS**

**TSCA (TOXIC SUBSTANCE CONTROL ACT) listed:** Calcium carbonate  
**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** Not listed  
**EPCRA (EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT):**  
 302 EXTREMELY HAZARDOUS SUBSTANCE TPQ: Not EHS  
 304 EXTREMELY HAZARDOUS SUBSTANCE RQ: Not EHS  
 311/312 HAZARD CATEGORIES: Acute: No Chronic: Yes Fire: No Pressure: No Reactivity: No  
 313 REPORTABLE INGREDIENTS: Not listed in Section 313.  
**CLEAN AIR ACT AMENDMENTS Section 112:** Not listed as Hazardous Air Pollutant in Section 112 of the CAAA.

**STATE REGULATIONS:** Refer to individual state agency for information.

**INTERNATIONAL REGULATIONS:** Refer to European Chemical Substance Information System (ESIS)  
 Refer to Australian Hazardous Substance Information System (HSIS)

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**SECTION 16: OTHER INFORMATION**

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**NFPA HAZARD CLASSIFICATION**

**HEALTH: 1      FLAMMABILITY: 1      REACTIVITY: 0**

**HMIS HAZARD CLASSIFICATION**

**HEALTH: 0      FLAMMABILITY: 1      PHYSICAL: 0      PROTECTION: 1B**

**PREPARATION INFORMATION:**

Centers for Disease Control (CDC) Agency for Toxic Substances and Disease Registry (ATSDR)  
National Fire Protection Association (NFPA)  
Hazardous Materials Information System (HMIS)  
U.S. EPA Chemical Emergency Preparedness and Prevention Office (CEPPO) List of Lists  
U.S. EPA Substance Registry Service (TSCA)  
U.S. Dept of Labor Occupational Safety & Health Administration (OSHA) 29 CFR 1910.1000  
U.S. Dept of Transportation (DOT) 49 CFR 172.101

**DISCLAIMER:** The information expressed in this document regarding this product is believed to be reliable. However, no guarantee or warranty of any kind, express or implied, concerning the use of this product is intended.