

SAFETY DATA SHEET

SDS DATE: 05/20/2015

SECTION 1: PROD	DUCT AND COMPANY IDENTIFICATION				
Availa [®] Zn 1 Zinc-amino acid c	20 omplex – Livestock nutritional feed additive				
	ation Drive, Suite 240 IN 55344-7265				
GENERAL INFO P	HONE: ZINPRO 952-944-2736				
EMERGENCY PHO	DNE (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: HAZA	RDS IDENTIFICATION				
Classification:	Not Classified				
Labeling:	Not Required				
SECTION 3: COM	POSITION/INFORMATION ON INGREDIENTS				
INGREDIENT	CAS NO. % WT EPCRA 313				
Zinc amino aci	id complex None 12% (as Zn) Yes				
SECTION 4: FIRS	T AID MEASURES				
Avoid contact	with all workplace chemicals.				
SKIN:	After contact with skin, wash immediately with plenty of soap and water. Remove contaminated clothing and wash before reuse. If irritation develops, get medical attention.				
EYES:	Wash eyes with copious amounts of water. Consult a physician.				
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. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical attention. If breathing has stopped, provide artificial respiration.

SECTION 5: FIRE-FIGHTING MEASURES					
SUITABLE EXTINGUISHING MEDIA:		Dry chemical, CO ₂ , 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 R	ELEASE MEASUR	ΈS			
		nal protective equipment including gloves and safety glasses or face shield when handling ct. When handling, do not eat, drink, or smoke.			
ENVIRONMENTAL PRECAU	TIONS: Prevent	product from entering drains.			
,		sweep up and recover uncontaminated material for re-use. Scoop remaining waste into labeled container for disposal.			
SECTION 7: HANDLING AN	D 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:	NS: 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

	ermissible Exposure Level
Zinc-amino acid complex	None listed
Zinc dust	None listed
Nuisance dust (total)	15.0 mg/m ³ (TWA)
Nuisance dust (respirable fraction)	5.0 mg/m ³ (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

APPEARANCE:	Brown, granular		
ODOR:	Sweet, organic	PERCENT SOLIDS BY WEIGHT:	100%
PHYSICAL STATE:	Solid	PERCENT VOLATILE:	0%
		VOLATILE ORGANIC CMPDS (VOC):	0%
pH:	NA	FLAMMABLE LIMITS IN AIR UPPER	
MELTING POINT:	>200 °C	(% BY VOLUME) LOWEF	R: NA
SPECIFIC GRAVITY (H ₂ O=1	I): 0.620 at 20°C	FLASH POINT:	>200 °C
SOLUBILITY IN WATER:	Active product is water soluble Carrier is insoluble	AUTOIGNITION TEMPERATURE:	>200 °C

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	This product is stable under	This product is stable under recommended storage conditions and in normal use.				
CONDITIONS TO) AVOID (STABILITY):		eneration of dust while handling. As with all dusts, particularly those containing finely divided airborne material may explode or burn when exposed to source of			
INCOMPATIBILITY (MATERIAL TO AVOID):		Organic and metallic compounds are incompatible with acids and strong oxidizers. Potentially violent reactions may occur on mixing with these materials.				
HAZARDOUS DE	ECOMPOSITION OR BY-PROD	OUCTS:	Thermal decomposition may release irritating gases, such as metal oxides, or toxic gases, such as carbon monoxide.			
HAZARDOUS PO	DLYMERIZATION:	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. The following information pertains to the individual mineral components of this product, but note that the product, as supplied contains no free metals.

Acute Toxicity: (Not Classified)	Acute toxicity estimate (ATE) for this mixture:	LD ₅₀ (oral) = 5,250 mg/kg
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Acute toxicity data for metal constituents, LD₅₀ (oral, rat): Zinc 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 zinc in the mixture at a concentration >10% by weight. Skin irritation has been associated with exposure to inorganic zinc salts.
Eye Irritant:	Not Classified. Contains zinc in the mixture at a concentration >10% by weight. May cause eye irritation. Serious eye damage has been associated with exposure to inorganic zinc salts.
Reproductive Toxicity:	Not Classified
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, a metal that occurs naturally throughout the environment, in rocks, soil, and water and is an essential element in plants and animals. Inorganic zinc and zinc compounds have been utilized commercially as fungicides, algaecides, microbiocides, and wood preservatives, illustrating that targeted ecological effects of such materials do occur. There is no data regarding the actual eco-toxicity of the metal-amino acid complexes in this product, which is formulated and approved for ingestion by livestock.

SECTION 13: DISPOSAL CONSIDERATIONS

This product is not a hazardous waste when disposed. As with all waste materials, it is recommended that residuals of this product and the container be disposed in a responsible manner at a licensed landfill or recycling center.

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 metal compound is regulated as follows:

CERCLA (COMPREHENSIVE RE	
311/312 HAZARD CATEGOR	
313 REPORTABLE INGRED CLEAN AIR ACT AMENDMENTS	IENTS:Zinc cmpds N987 >1.0% by weight; Zinc as dust or fume >1.0% by weightSection 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)

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

NFPA HAZARD CLASSIFICATION HEALTH: 0 FLAMMABILITY: 1 REACTIVITY: 0							
HMIS HAZARD C HEALTH:	LASSIFI 0	CATION 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.