



PERFORMANCE MINERALS®

SAFETY DATA SHEET

SDS DATE: 05/20/2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Copro® 25

Cobalt glucoheptonate – Livestock nutritional feed additive

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: Skin Sensitizer, Category 1
Carcinogen, Category 2
Mutagen, Category 2

Labeling: Symbol Health Hazard



Signal Word Warning

Hazard

Statements May cause an allergic skin reaction
Suspected of causing cancer
Suspected of causing genetic defects

Precautionary
Statements

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves and eye/face protection.
Avoid breathing dust.
If on skin, wash with plenty of water.
If exposed or concerned, get medical advice
If skin irritation or rash occurs, get medical attention.
Take off contaminated clothing, and wash it before re-use.
Contaminated work clothing should remain at the workplace.
Dispose of contents/container to a licensed landfill or recycling center.



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	% WT	EPCRA 313
Cobalt glucoheptonate	None	2.5% (as Co)	Yes

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, CO₂, 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 a 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**

Substance	Permissible Exposure Level
Cobalt glucoheptonate	None listed
Cobalt dust	0.1 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.

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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	PERCENT SOLIDS BY WEIGHT:	100%
ODOR:	Sweet, organic	PERCENT VOLATILE:	0%
PHYSICAL STATE:	Solid	VOLATILE ORGANIC CMPDS (VOC):	0%
pH:	NA	FLAMMABLE LIMITS IN AIR (% BY VOLUME)	UPPER: NA LOWER: NA
MELTING POINT:	>200 °C	FLASH POINT:	>200 °C
SPECIFIC GRAVITY (H2O = 1):	0.480 at 20°C	AUTOIGNITION TEMPERATURE:	>200 °C
SOLUBILITY IN WATER:	Active product is water soluble; Carrier is insoluble		

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.

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. 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 data for metal constituents, LD₅₀ (oral, rat): Cobalt 6171 mg/kg

Sub acute/Chronic Effects associated with mineral components:

Skin Sensitizer, Category 1:	This product contains cobalt in the mixture at a concentration greater than 0.1% by weight. May cause an allergic skin reaction or other allergic response, particularly with repeated exposure.
Carcinogen, Category 2:	The International Agency for Research on Cancer (IARC) has determined that cobalt and cobalt compounds are possibly carcinogenic to humans, primarily by inhalation (Group 2B). This product contains cobalt in the mixture at a concentration greater than 1% by weight.
Mutagen, Category 2:	Cobalt metal and stable inorganic cobalt compounds have been shown to be genotoxic or mutagenic in mammalian somatic cell assay systems. This product contains an organic form of cobalt in the mixture at a concentration greater than 1.0% by weight.
Skin Irritant:	Not Classified.
Eye Irritant:	Not Classified.
Reproductive Toxicity:	Not Classified. This product contains cobalt at a concentration less than 3% by weight. May cause developmental effects in offspring. This is based only on 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 cobalt, a metal that occurs naturally throughout the environment, in rocks, soil, and water and is an essential element in plants and animals. Inorganic cobalt and cobalt compounds have limited usage as pesticides, primarily as a wood preservative and fungicide, illustrating that targeted ecological effects of such materials do occur. There is no data regarding the actual eco-toxicity of the organometallic complex 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

Organometallic complexes are not regulated under any of the listed programs. The metallic component as a free metal is regulated as follows:

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT) listed: Cobalt and cobalt 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 E-S

304 EXTREMELY HAZARDOUS SUBSTANCE RQ: Not E-S

311/312 HAZARD CATEGORIES: Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: No

313 REPORTABLE INGREDIENTS: Cobalt compounds N096 >0.1% by weight

CLEAN AIR ACT AMENDMENTS Section 112: Cobalt compounds are listed as Hazardous Air Pollutants in Section 112 of the CAAA and may be subject to regulation if emitted to the air.

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: None

NFPA HAZARD CLASSIFICATION

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

HMIS HAZARD CLASSIFICATION

HEALTH: 1 **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
Pesticide Network Database
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

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