



## Product Name: ZinMet® Liquid Zinc Methionine

### MATERIAL SAFETY DATA SHEET

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#### PRODUCT INFORMATION & COMPOSITION

PRODUCT NAME: ZinMet® CAS #: None  
TRADE NAME / SYNONYM: (2-amino-4-methylthiobutanoate) zinc (II) sulfate  
*bis*(2-amino-4-methylthiobutanoate) zinc (II) Formula:  $Zn(C_5H_{11}NO_2S)_a \cdot xSO_4 \cdot nH_2O$ ;  
where  $a = 1$  or  $2$ ,  $x = \frac{1}{2}$  or  $0$ , and  $n = 2$  or  $4$

NFPA RATINGS (scale 0-4): HEALTH=2 FLAMMABILITY=0 REACTIVITY=0

PRODUCT COMPOSITION (W/W)	CAS NUMBER	CHEMICAL NAME
32 %	NA	ZINC (II) METHIONINE SULFATE <sup>1</sup>
18%	NA	INORGANIC SULFATE SALTS
50 %	7732-18-5	WATER

#### PHYSICAL AND CHEMICAL PROPERTIES

DESCRIPTION: LIGHT TO DARK BROWN SOLUTION  
SPECIFIC GRAVITY (H<sub>2</sub>O=1): 1.428 VAPOR PRESSURE (MM HG): 23.8 @ 25°C  
PH: 4.6 SOLUBILITY IN WATER: MODERATELY SOLUBLE  
FLASHPOINT (TAG CLOSED CUP): NA VOLATILITY: NA  
MELTING POINT: 31°F (0°C) BOILING POINT: 212°F (100°C)  
STABILITY: STABLE; DECOMPOSES ABOVE 500°F (260°C) HAZARDOUS POLYMERIZATION: NONE  
INCOMPATIBILITIES: OXIDIZERS; CONCENTRATED STRONG ACIDS AND BASES

#### HEALTH HAZARDS, EXPOSURE LIMITS, & CARCINOGENICITY

AN EXPOSURE LIMIT FOR THIS PRODUCT HAS NOT BEEN ESTABLISHED. EXPOSURE LIMITS FOR ZINC (II) CHLORIDE ARE:

ACUTE TOXICITY: LD<sub>50</sub> (ORAL): 350 MG/KG CARCINOGEN STATUS: NONE  
ACUTE EFFECTS: MODERATELY TOXIC TARGET ORGANS: LIVER, RESPIRATORY AND GASTROINTESTINAL TRACTS, KIDNEYS

<sup>1</sup>ZINC IS SUBJECT TO THE REQUIREMENTS OF 40 CFR PART 372, SARA TITLE III SECTION 313, AND SECTION 112 OF THE CLEAN AIR ACT AMENDMENTS.

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EMERGENCY, PRECAUTIONARY AND FIRST AID PROCEDURES

SKIN CONTACT: WASH THOROUGHLY WITH WATER FOR A MINIMUM OF 15 MINUTES. CONTACT MEDICAL AUTHORITIES.

EYE CONTACT: REMOVE CONTACT LENSES. WASH THOROUGHLY WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. CONTACT MEDICAL AUTHORITIES IMMEDIATELY.

INGESTION: DO NOT INDUCE VOMITING. ADMINISTER 8-12 OUNCES OF WATER OR MILK. SEEK IMMEDIATE MEDICAL ATTENTION.

INHALATION: REMOVE TO FRESH AIR AND SEEK MEDICAL ATTENTION IF BREATHING DIFFICULTY DEVELOPS.

FIRE: USE DRY CHEMICAL OR FOAM EXTINGUISHING MEDIA; NOT CONSIDERED A FIRE HAZARD.

HANDLING: WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (GLASSES, GOGGLES, & FACE SHIELD) TO PREVENT EYE CONTACT. APPROPRIATE MEASURES MUST ALSO BE TAKEN TO PREVENT PROLONGED SKIN CONTACT AND INHALATION EXPOSURES. SUCH MEASURES SHOULD INCLUDE, AT A MINIMUM, RUBBER GLOVES AND ENGINEERING CONTROLS TO MINIMIZE EXPOSURE RISKS.

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TRANSPORTATION DATA

D.O.T. PROPER SHIPPING NAME: NOT CURRENTLY REGULATED      HAZARD CLASS: NOT APPLICABLE

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DATE PREPARED

FEBRUARY 2, 2005