# MATERIAL SAFETY DATA SHEET

## SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 9% ZINC WITH NANO PRODUCT USE/CLASS: PLANT MICRO-NUTRIENT ID NUMBER: FE46

MANUFACTURER: EST INC PO.BOX-11232 SHAWNEE MISSION, KS 66207 EMERGENCY TELEPHONE: 800-424-9300

PREPARER: REGULATORY COMPLIANCE

PREPARE DATE: 01-03-15

SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS	3
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CHEMICAL NAME	CAS NUMBER	WT. PERCENT IS LESS THAN	TLV-TWA	TLV-STEL	PEL-TWA	
ZINC (Zn)	NA	PROPRIETARY	NA	NA	NA	
HUMIC WITH CARBON	NA	PROPRIETARY	NA	NA	NA	
HYDROGEN HYDROXIDE	7732-18-8	PROPRIETARY	NA	NA	NA	
No Hazardous Materials are contained in this Product						

(See Section XI for abbreviation legend)

SECTION III - PHYSICAL DATA

BOILING RANGE: 212°F TO 220°FVAPOR DENSITY: (AIR=1) APPROXIMATELY 1.07g/1 AT 59°F(30% UREA)ODOR: SLIGHT EARTHY ODORSPECIFIC GRAVITY: (H20=1) 1.28 AT 60°F (HEAVIER THAN WATER)APPEARANCE: LIGHT TO DARK BROWN COLOREVAPORATION RATE: NASOLUBILITY IN H20: DISPERSIBLEPH: 6.5 TO 7.5SOLUBILITY IN H20: DISPERSIBLE

(See Section XI for abbreviation legend)

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: NA LOWER EXPLOSIVE LIMIT: N.A UPPER EXPLOSIVE LIMIT: N.A. (TAGLIABUE CLOSED CUP)

EXTINGUISHING MEDIA: ALCOHOL FOAM CO2 DRY CHEMICAL FOAM WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS: UPON BURNING, TOXIC GASES MAY BE RELEASED.

SPECIAL FIREFIGHTING PROCEDURES: FIREFIGHTERS SHOULD WEAR SELF CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING.

#### SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE - EYE CONTACT: MAY CAUSE IRRITATION AND TEARING

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: NONE RECOGNIZED. THIS PRODUCT MAY CAUSE ALLERGIC SKIN REACTIONS IN SENSITIVE INDIVIDUALS. IRRITATION.

EFFECTS OF OVEREXPOSURE - INHALATION: INHALATION: REMOVE TO FRESH AIR, RESTORE BREATHING. CONSULT A PHYSICIAN. IRRITATION FROM PROLONGED EXPOSURE WITH LITTLE VENTILATION.

EFFECTS OF OVEREXPOSURE - INGESTION: LARGE QUANTITIES UPSETTING TO GASTROINTESTINAL TRACT.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: NONE KNOWN.

FIRST AID - EYE CONTACT: FLUSH WITH WATER 15 MINUTES, LIFTING EYELIDS.

FIRST AID - SKIN CONTACT: WASH WITH SOAP AND WATER.

FIRST AID - INHALATION: REMOVE TO FRESH AIR.

FIRST AID - INGESTION: DO NOT INDUCE VOMITING. DRINK LARGE AMOUNTS OF WATER.

PRIMARY ROUTE (S) OF ENTRY: INGESTION EYE CONTACT

### SECTION VI - REACTIVITY DATA

HAZARDOUS DECOMPOSITION PRODUCTS: NONE KNOWN.

CONDITIONS TO AVOID: NONE KNOWN.

INCOMPATABILITY: NONE KNOWN.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions. normal storage conditions.

STABILITY: This product is stable under

### SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: DIKE FOR RECOVERY OR DISPOSAL. SPILL MAY BE ABSORBED ONTO APPROPRIATE ABSORBENT MATERIAL.

WASTE DISPOSAL METHOD: DISPOSE IN ACCORDANCE WITH APPROPRIATE FEDERAL, STATE AND LOCAL REGULATIONS.

SECTION VIII - SAFE HANDLING AND USE INFORMATION RESPIRATORY PROTECTION: No Information.

VENTILATION: FOR EXTERIOR BULK STORAGE TANKS, SUFFICIENT VENTILATION, IN VOLUME AND PATTERN, SHOULD BE PROVIDED TO KEEP AIR CONTAMINATION BELOW CURRENT APPLICABLE OSHA PERMISSIBLE EXPOSURE LIMIT OR ACGHI'S TLV LIMIT.

SKIN PROTECTION: RECOMMENDED FOR PROLONGED OR REPEATED CONTACT.

EYE PROTECTION: SAFETY GLASSES OR GOGGLES.

OTHER PROTECTIVE EQUIPMENT: No Information.

HYGENIC PRACTICES: WASH AFTER EACH USE.

#### SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: KEEP AWAY FROM SPARKS AND OPEN FLAMES.

OTHER PRECAUTIONS: KEEP CONTAINERS CLOSED. KEEP FROM FREEZING CONDITIONS.

SECTION X - HMIS RATINGS

HMIS RATINGS: HEALTH: 1

FLAMMABILITY: 0

REACTIVITY: 0

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SECTION XI - OTHER REGULATIONS

SARA SECTION 313: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

------ CHEMICAL NAME ------ CAS NUMBER No SARA Section 313 components exist in this product.

WT/WT %

PREVIOUS MSDS REVISION DATE: 11/17/13

LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS is been checked and should be accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

<END OF MSDS>