



**THE ANDERSONS  
SAFETY DATA SHEET**

DATE PREPARED: 1/19/16

CURRENT AS OF: 7/25/16

**SECTION 1: PRODUCT / SUPPLIER IDENTIFICATION**

PRODUCT NAME: MicroSolutions® Nulex® 15% Zinc

PRODUCT USE: Fertilizer / micronutrient

MFR INFO: The Andersons Ag Specialty – Sergeant Bluff Plant  
2717 Port Neal Circle  
Sergeant Bluff, Iowa USA 51054

FOR EMERGENCY: (800) 757-8951

FOR INFORMATION: (419) 891-2957

**SECTION 2: HAZARDS IDENTIFICATION**

HAZARD SYMBOLS / STATEMENTS:



**WARNING**

**HARMFUL IF SWALLOWED  
MAY CAUSE EYE IRRITATION  
MAY CAUSE RESPIRATORY IRRITATION**

HAZARD CLASSIFICATIONS:

*ACUTE TOXICITY*

*EYE IRRITATION*

*TARGET ORGAN SYSTEMIC TOXICITY*

CATEGORY

4

2A

3

INTERPRETATION

Low to Moderate

Eye Irritation Possible

Respiratory Irritation Possible

PRECAUTIONARY STATEMENTS:

- *KEEP OUT OF REACH OF CHILDREN*
- *READ LABEL BEFORE USE*
- *IF MEDICAL ADVICE IS NEEDED, HAVE PRODUCT CONTAINER OR LABEL ON HAND*
- *CALL A POISON CENTER / PHYSICIAN IF UNWELL*
- *IF ON SKIN, WASH WITH PLENTY OF SOAP AND WATER*
- *IF SKIN IRRITATION OCCURS, GET MEDICAL ADVICE*
- *IF IN EYES, RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES – REMOVE CONTACT LENSES*
- *IF EYE IRRITATION PERSISTS, GET MEDICAL ADVICE*
- *DO NOT EAT, DRINK, OR SMOKE WHEN USING PRODUCT*
- *WASH HANDS THOROUGHLY AFTER HANDLING*
- *USE ONLY OUTDOORS OR IN WELL VENTILATED AREAS*
- *AVOID BREATHING MIST*
- *IF INHALED, REMOVE TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING*
- *STORE CONTAINER TIGHTLY CLOSED*
- *DISPOSE OF CONTENTS / CONTAINER IN ACCORDANCE WITH NATIONAL / REGIONAL / LOCAL REGULATIONS*

NOTE: 16% OF THE MIXTURE CONSISTS OF INGREDIENTS OF UNKNOWN TOXICITY

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

<u>CHEMICAL IDENTITY</u>	<u>SYNONYM</u>	<u>CAS NUMBER</u>	<u>CONCENTRATION (%)</u>
Micronutrient fertilizer		Mixture	100.0

**SECTION 4: FIRST AID MEASURES**

IF INHALED:	Move victim to fresh air. Seek medical attention if irritation persists.
IF ON SKIN:	Wash affected areas with soap and water. Seek medical attention if irritation persists. Wash contaminated clothing before re-use.
IF IN THE EYES:	Immediately flush with water for at least 20 minutes. Seek medical attention if irritation persists.
IF SWALLOWED:	If victim is alert and not convulsing, give one glass of water to dilute material, but DO NOT induce vomiting. Seek immediate medical attention.
SPECIAL TREATMENT:	None known
HEALTH HAZARDS:	See Section 11

**SECTION 5: FIREFIGHTING MEASURES**

EXTINGUISHING MEDIA:	Use media suitable for surrounding fire. No special media required.
SPECIFIC FIRE HAZARDS:	Decomposition products may be toxic.
SPECIAL FIREFIGHTING PROCEDURES:	Wear full protective clothing and positive-pressure self-contained breathing apparatus.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

SPILL / RELEASE PROCEDURES:	Collect spilled product and store to re-use, if possible. Contaminated product and/or environmental media should be recovered and disposed of properly.
ENVIRONMENTAL PRECAUTIONS:	Prevent spilled material from entering storm drains or water bodies.
PROTECTIVE EQUIPMENT:	See Section 8

**SECTION 7: HANDLING AND STORAGE**

Store in a cool, dry, well ventilated area. Do not store above 120° F.

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

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

**SBL007 MICROSOLUTIONS NULEX 15% ZINC**

<u>HAZARDOUS COMPONENT</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Ammonia	35 mg/m <sup>3</sup>	18 mg/m <sup>3</sup> 27 mg/m <sup>3</sup> (STEL)
Sulfuric acid	1 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>
Zinc oxide	5 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>

**PERSONAL PROTECTIVE EQUIPMENT / PROTECTION MEASURES / CONTROLS:**

RESPIRATORY PROTECTION:	NIOSH approved particulate / mist respirator, if required
EYE PROTECTION:	Safety glasses with sideshields, goggles, or faceshield recommended
SKIN PROTECTION:	Long sleeves, protective gloves recommended
VENTILATION:	Local exhaust ventilation recommended

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE AND ODOR:	Colorless to blue liquid with slight ammonia odor
pH:	10.4
MELTING POINT:	Not applicable
BOILING POINT:	Not available
FLASH POINT:	Not available
EVAPORATION RATE:	Not available
FLAMMABLE LIMITS:	Not available
VAPOR PRESSURE:	Not available
VAPOR DENSITY:	Not available
SPECIFIC GRAVITY:	1.30
SOLUBILITY (IN WATER):	Soluble
PARTITION COEFFICIENT:	Not available
AUTOIGNITION TEMP:	Not available
DECOMPOSITION TEMP:	Not available
ODOR THRESHOLD:	Not available
VISCOSITY:	Not available

**SECTION 10: STABILITY AND REACTIVITY**

STABILITY:	Product is stable.
CONDITIONS TO AVOID:	Excessive heat
INCOMPATIBILITY:	Strong oxidizers, reducers, bases
HAZARDOUS DECOMPOSITION PRODUCTS:	SO <sub>x</sub> , NH <sub>3</sub> , ZnO, HCl, NO <sub>x</sub> , CO <sub>x</sub>

**SECTION 11: TOXICOLOGICAL INFORMATION**

HEALTH EFFECTS:	May be irritating to the eyes, skin, nose, throat, and respiratory tract, and may cause sore throat, coughing, shortness of breath, and increased pulse rate and blood pressure. Ingestion may cause methemoglobinemia, cyanosis, headache, weakness, dizziness, and stupor. Significant overexposure may result in severe skin burns / blisters, corneal ulcers, blindness, nausea, vomiting, and death.
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**SBL007 MICROSOLUTIONS NULEX 15% ZINC**

CARCINOGENICITY: None of the ingredients are known / listed carcinogens. However, product may contain trace amounts of cadmium, which is listed by IARC as a human carcinogen.

**INGREDIENT TOXICITY RANGES:**

ORAL: 1,410 mg/kg (ammonium chloride) -- 2,217 mg/kg (ammonium nitrate)

DERMAL: > 2,000 mg/kg (ammonium chloride)

INHALATION: > 88.8 mg/l (4 hr) (ammonium nitrate)

**SECTION 12: ECOLOGICAL INFORMATION**

This product is not known to be persistent or have the potential to bioaccumulate.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of in accordance with all national, regional / state, and local regulations. Reuse recovered product where possible.

**SECTION 14: TRANSPORT INFORMATION**

This product is not regulated as a transportation hazard.

**SECTION 15: REGULATORY INFORMATION**

SARA SECTION 311 / 312 HAZARD CATEGORY: IMMEDIATE HAZARD

**SECTION 16: OTHER INFORMATION**

NFPA RATINGS:	HEALTH	1
	FLAMMABILITY	0
	INSTABILITY	0

HMIS RATINGS:	HEALTH	1
	FLAMMABILITY	0
	PHYSICAL HAZARD	0

MSDS ID NO: SBL007

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PREPARED BY: SS

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