



**THE ANDERSONS
SAFETY DATA SHEET**

DATE PREPARED: 3/12/24

CURRENT AS OF: 3/12/24

SECTION 1: PRODUCT / SUPPLIER IDENTIFICATION

PRODUCT CODE: 10000125, 10000126, 10001956, 10001709

PRODUCT NAME: TRI Z™

PRODUCT USE: Fertilizer

MFR INFO: The Andersons, Inc.
PO Box 119
Maumee, OH 43537

FOR EMERGENCY: (800) 757-8951

FOR INFORMATION: (419) 893-5050

SECTION 2: HAZARDS IDENTIFICATION

HAZARD SYMBOLS / STATEMENTS:



WARNING

**MAY BE HARMFUL IF SWALLOWED
MAY CAUSE MILD SKIN IRRITATION
MAY CAUSE EYE IRRITATION
MAY CAUSE RESPIRATORY IRRITATION**

HAZARD CLASSIFICATIONS:

ACUTE TOXICITY

SKIN IRRITATION

EYE IRRITATION

TARGET ORGAN SYSTEMIC TOXICITY

CATEGORY

5

3

2B

3

INTERPRETATION

Low

Mild Skin Irritation Possible

Promptly Reversible

Transient 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 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*
- *WASH HANDS 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 IN WELL-VENTILATED PLACE*
- *DISPOSE OF CONTENTS / CONTAINER IN ACCORDANCE WITH NATIONAL / REGIONAL / LOCAL REGULATIONS*

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<u>CHEMICAL IDENTITY</u>	<u>SYNONYM</u>	<u>CAS NUMBER</u>	<u>CONCENTRATION (%)</u>
Ureas	Mixed ureas	57-13-6	10-20
Zinc Sulfate Monohydrate		7446-19-7	00-10
Ammonium Chloride	Salmiac	12125-02-9	10-20
Zinc EDTA, Diammonium Salt Solution		67859-51-2	10-20
Zinc Oxide		1314-13-2	10-20
Ammonium Hydroxide Solution	Aqua Ammonia	1336-21-6	00-10

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 and induce vomiting. Seek 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 (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPILL / RELEASE PROCEDURES:	Collect spilled product and store to re-use. 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

Wash hands after handling material. Do not eat, drink or smoke while handling the material. Do not breathe vapors/mist. Not intended for human consumption. Store in a cool, dry, well-ventilated area away from incompatible materials.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTIONEXPOSURE LIMITS:

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

<u>HAZARDOUS COMPONENT</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Ammonium Hydroxide	25 mg/m ³ (TWA) 35 mg/m ³ (STEL)	18 mg/m ³ 27 mg/m ³ (STEL)
Manganese Compounds	5mg/m ³	0.2mg/m ³

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, chemical resistant (rubber) gloves recommended
VENTILATION:	Local exhaust ventilation recommended

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:	Yellow liquid with slight ammonia odor
pH:	9.5
MELTING POINT:	Not applicable
BOILING POINT:	~ 200 F
FLASH POINT:	Not flammable
EVAPORATION RATE:	Not available
FLAMMABLE LIMITS:	Not applicable
VAPOR PRESSURE:	Not available
VAPOR DENSITY:	Not available
SPECIFIC GRAVITY:	1.24
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:	Extreme heat
INCOMPATIBILITY:	Strong reducing agents
HAZARDOUS DECOMPOSITION PRODUCTS:	NO _x , NH ₃ , metal oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

HEALTH EFFECTS: May cause irritation of the eyes, skin, respiratory tract, and gastrointestinal tract

CARCINOGENICITY: None of the ingredients are known / listed carcinogens.

INGREDIENT TOXICITY RANGES:

- ORAL: > 1,410 (ammonium chloride) – 14,300 mg/kg (urea)
- DERMAL: > 2,000 mg/kg (ammonium chloride)

SECTION 12: ECOLOGICAL INFORMATION

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

SECTION 13: DISPOSAL CONSIDERATIONS

Use product for intended purpose where possible. Dispose of in accordance with all national, regional / state, and local regulations.

SECTION 14: TRANSPORT INFORMATION

This product is not regulated as a transportation hazard.

SECTION 15: REGULATORY INFORMATION

SARA 311/312:	ACUTE
SARA 313:	Zinc Sulfate Monohydrate Zinc Compounds Ammonium Hydroxide
REPORTABLE QUANTITY:	Zinc Compounds (No RQ) Ammonium Hydroxide (1,000 lbs.)
RIGHT-TO-KNOW:	Zinc Compounds (CA, IL, MA, NJ, PA) Ammonium Hydroxide (PA)
CLEAN WATER ACT:	Zinc Sulfate Monohydrate

SECTION 16: OTHER INFORMATION

NFPA RATINGS:	HEALTH	1
	FLAMMABILITY	0
	INSTABILITY	0
HMIS RATINGS:	HEALTH	1
	FLAMMABILITY	0
	INSTABILITY	0

PREPARED BY: DBA EHS CONSULTING

The information and data contained herein is based upon facts considered to be correct as of the date hereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will The Andersons be responsible for damages of any nature whatsoever resulting from the use or reliance upon this information. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which this information refers.