



VAN DIEST SUPPLY COMPANY

Distributor and Manufacturer of Agricultural Chemicals

SAFETY DATA SHEET

1. IDENTIFICATION

1.1 PRODUCT IDENTIFIER:	CORNBELT® N-TICE™
1.2 PRODUCT FORM:	Mixture
1.3 SUPPLIER'S DETAILS:	Van Diest Supply Company 1434 220th Street Post Office Box 610 Webster City, IA 50595-0610
1.4 EMERGENCY PHONE NUMBER:	FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT - CALL CHEMTREC - DAY OR NIGHT - 1-800-424-9300

2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE - GHS-US CLASSIFICATION:

Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.
Reproductive toxicity	Category 2	H361 - Suspected of damaging fertility or the unborn child.

Full text of Hazard Statements - See Section 16 - Other Information

2.2 GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS:

GHS US LABELING

Hazard Pictograms (GHS US):



Signal Word (GHS US):

Danger

Hazard Statements (GHS US):

H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H361 - Suspected of damaging fertility or the unborn child.

Precautionary Statements (GHS US):

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear eye protection, face protection, skin protection, clothing protection.
P302+P352 - If on skin: wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P310 - Immediately call a doctor or poison control center if ingested or eye contact has occurred.
P321 - Specific treatment (see additional precautions on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P405 - Store locked up.

2. HAZARDS IDENTIFICATION (continued)**2.2 GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS (continued):**

Precautionary Statements (GHS US): P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3 OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION:

No additional information available.

2.4 UNKNOWN ACUTE TOXICITY (GHS US):

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS**3.1 SUBSTANCES:**

Not applicable

3.2 MIXTURES:

CHEMICAL NAME	PRODUCT IDENTIFIER	%	GHS-US CLASSIFICATION
N-(n-butyl) thiophosphoric triamide (NBPT) - New	(CAS-No.) 94317-64-3	1 - 30	Skin Irritation: 2, H315
			Eye Damage: 1, H318
			Reproductive: 2, H361
dimethyl sulfoxide	(CAS-No.) 67-68-5	> 20	Flammable Liquid: 4, H227

Full text of Hazard Statements - See Section 16 - Other Information

4. FIRST AID MEASURES**4.1 DESCRIPTION OF FIRST AID MEASURES:**

General: Never give anything by mouth to an unconscious person. If exposed or concerned: Get medical advice/attention.

After Inhalation: Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.

After Skin Contact: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention. Wash with plenty of water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

After Eye Contact: Call a physician immediately. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

After Ingestion: Call a poison center or a doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2 MOST IMPORTANT SYMPTOMS/EFFECTS (ACUTE AND DELAYED):

Potential adverse human health effects & symptoms: Based on available data, the classification criteria are not met.

Symptoms/effects: Suspected of damaging fertility or the unborn child.

Symptoms/effects after skin contact: Irritation. Causes skin irritation.

Symptoms/effects after eye contact: Serious damage to eyes. Causes serious eye damage.

4.3 IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NECESSARY:

Treat symptomatically.

5. FIREFIGHTING MEASURES**5.1 SUITABLE EXTINGUISHING MEDIA:**

Foam, dry powder, CO₂, water spray, sand

5.2 UNSUITABLE EXTINGUISHING MEDIA:

Do not use a heavy water stream.

5. FIREFIGHTING MEASURES (continued)**5.3 SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:**

Hazardous decomposition products in case of fire: Toxic fumes may be released.

5.4 PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent firefighting water from entering the environment.

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

6. ACCIDENTAL RELEASE MEASURES**6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:****For non-emergency personnel:**

Protective equipment: Safety glasses, gloves, protective clothing

Emergency procedures: Ventilate spillage area. Avoid contact with skin and eyes. Evacuate unnecessary personnel.

For emergency responders:

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information, refer to Section 8 - Exposure Controls/Personal Protection. Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

6.2 ENVIRONMENTAL PRECAUTIONS:

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

For containment: Contain released product, collect/pump into suitable containers.

Methods for cleaning up: Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information: Dispose of materials or solid residues at an authorized site.

6.4 REFERENCE TO OTHER SECTIONS:

See Section 8 - Exposure Controls/Personal Protection. For further information, see Section 13 - Disposal Considerations.

7. HANDLING AND STORAGE**7.1 PRECAUTIONS FOR SAFE HANDLING:**

Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking, and/or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Hygiene measures: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash hands, forearms, and face thoroughly after handling.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Storage conditions: Keep only in original container in a cool, well-ventilated area. Keep container closed when not in use. Store in a well-ventilated place. Keep cool. Keep only in the original container in a cool, well-ventilated place away from incompatible products & materials. Keep container closed when not in use.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Sources of ignition. Direct sunlight.

Storage temperature: 20 - 100 °F

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

Cornbelt® N-TICE™	No additional information available.
dimethyl sulfoxide (67-68-5)	No additional information available.
N-(n-butyl) thiophosphoric triamide (NBPT) - New (94317-64-3)	No additional information available.

8.2 APPROPRIATE ENGINEERING CONTROLS:

Appropriate engineering controls:	Ensure good ventilation of the work station.
Environmental exposure controls:	Avoid release to environment.

8.3 INDIVIDUAL PROTECTION MEASURES/PERSONAL PROTECTIVE EQUIPMENT:

Personal protective equipment:	Avoid all unnecessary exposure.
Hand protection:	Wear protective gloves.
Eye protection:	Chemical goggles or safety glasses.
Skin and body protection:	Wear suitable protective clothing
Respiratory protection:	Wear appropriate mask.
Personal protective equipment symbol(s):	



Other information: Do not eat, drink, and/or smoke during use.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Physical state:	Liquid
Color:	Blue
Odor:	Characteristic odor
Odor threshold:	No data available
pH:	10-11
Melting point:	Not applicable
Freezing point:	≤ 0 °C; ≤ 32 °F
Boiling point:	≥ 100 °C; ≥ 212 °F
Flash point:	Not determined
Relative evaporation rate (butylacetate = 1):	No data available
Flammability (solid, gas):	Non-flammable
Vapor pressure:	No data available
Relative vapor density at 20 °C; 68 °F:	No data available
Relative density:	No data available
Density:	1.16 g/mL (approximate)
Solubility:	Miscible with water
Partition coefficient (n-octanol/water) (Log P _{ow}):	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity, kinematic:	73.276 mm ² /s
Viscosity, dynamic:	85 cP 78 °F
Explosive limits:	No data available
Explosive properties:	No data available
Oxidizing properties	Not determined

9. PHYSICAL AND CHEMICAL PROPERTIES (continued)

9.2 OTHER INFORMATION: No additional information available.

10. STABILITY AND REACTIVITY**10.1 REACTIVITY:**

The product is non-reactive under normal conditions of use, storage and transport.

10.2 CHEMICAL STABILITY:

Not established.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:

Not established.

10.4 CONDITIONS TO AVOID:

Direct sunlight. Extremely high or low temperatures.

10.5 INCOMPATIBLE MATERIALS:

Strong acids. Strong bases.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:

Fumes. Carbon monoxide. Carbon dioxide.

11. TOXICOLOGICAL INFORMATION**11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:**

Acute toxicity (oral): Not classified

Acute toxicity (dermal): Not classified

Acute toxicity (inhalation): Not classified

dimethyl sulfoxide (67-68-5)	
LD ₅₀ , oral, rat	28,300 mg/kg bodyweight (equivalent or similar to OECD 401, Rat, Male/female, Experimental value, Oral, 14 days)
LD ₅₀ , dermal, rat	40,000 mg/kg bodyweight (Rat, Male/female, Experimental value, Dermal, 14 days)
N-(n-butyl) thiophosphoric triamide (NBPT) - New (94317-64-3)	
LD ₅₀ , oral, rat	2,000 mg/kg
LD ₅₀ , dermal, rat	2,000 mg/kg

Skin corrosion/irritation:	Causes skin irritation (pH 10 - 11).
Serious eye damage/irritation:	Causes serious eye damage (pH 10 - 11).
Respiratory/skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Suspected of damaging fertility or the unborn child.
STOT-single exposure:	Not classified
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified
Viscosity, kinematic:	73.276 mm ² /s
Potential adverse human health effects and symptoms:	Based on available data, the classification criteria are not met.
Symptoms/effects:	Suspected of damaging fertility or the unborn child.
Symptoms/effects after skin contact:	Irritation. Causes skin irritation
Symptoms/effects after eye contact:	Serious damage to eyes. Causes serious eye damage.

12. ECOLOGICAL INFORMATION**12.1 TOXICITY:**

Ecology - General: Not classified as dangerous for the environment according to the criteria of Directive 67/548/EEC. The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

dimethyl sulfoxide (67-68-5)	
LC ₅₀ , fish 1	> 25 g/L (OECD 203: Fish, Acute Toxicity Test, 96 h, <i>Danio rerio</i> , Static system, Fresh water, Experimental value, Lethal)
EC ₅₀ , <i>Daphnia</i> 1	24.6 g/L (OECD 202: <i>Daphnia</i> sp. Acute Immobilization Test, 48 h, <i>Daphnia magna</i> , Static system, Fresh water, Experimental value)
ErC ₅₀ , (algae)	17 g/L (OECD 201: Algae, Growth Inhibition Test, 72 h, <i>Pseudokirchneriella subcapitata</i> , Static system, Fresh water, Experimental value, Nominal concentration)
N-(n-butyl) thiophosphoric triamide (NBPT) - New (94317-64-3)	
LC ₅₀ , fish 1	≥ 1,140 mg/L Bluegill
EC ₅₀ , <i>Daphnia</i> 1	≥ 290 mg/L

12.2 PERSISTENCE AND DEGRADABILITY:

Cornbelt® N-TICE™	
Persistence and degradability	Biodegradable in the soil. Not established.
dimethyl sulfoxide (67-68-5)	
Persistence and degradability	Not readily biodegradable in water.
N-(n-butyl) thiophosphoric triamide (NBPT) - New (94317-64-3)	
Persistence and degradability	Not established.

12.3 BIOACCUMULATIVE POTENTIAL:

Cornbelt® N-TICE™	
Bioaccumulative potential	Not established.
dimethyl sulfoxide (67-68-5)	
BCF other aquatic organisms 1	3.16 (QSAR)
Partition coefficient, <i>n</i> -octanol/water (Log P _{OW})	-1.35 (Experimental value, 20 °C (68 °F))
Bioaccumulative potential	Not bioaccumulative
N-(n-butyl) thiophosphoric triamide (NBPT) - New (94317-64-3)	
Bioaccumulative potential	Not established.

12.4 MOBILITY IN SOIL:

Cornbelt® N-TICE™	
Ecology - soil	Not toxic to plants.
dimethyl sulfoxide (67-68-5)	
Surface tension	43.5 mN/m (20 °C [68 °F], 100 vol%)
Partition coefficient, <i>n</i> -octanol/water (Log K _{OC})	0.64 (log K _{OC} , SRC PCKOCWIN v1.66, calculated value)
Ecology - soil	Highly mobile in soil.

12.5 OTHER ADVERSE EFFECTS:

Other information: No other effects known. Avoid release to the environment.

13. DISPOSAL CONSIDERATIONS**13.1 DISPOSAL METHODS:**

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

13. DISPOSAL CONSIDERATIONS (continued)

13.1 DISPOSAL METHODS (continued):

Product/Packaging disposal recommendations:

Dispose of contents/containers in hazardous or special waste collection point, an approved disposal plant, a licensed hazardous waste disposal contractor or authorized waste collection site in accordance with local, regional, and/or international regulation, except for empty, clean containers which can be disposed of as non-hazardous waste.

Ecology - waste materials:

Avoid release to the environment.

14. TRANSPORT INFORMATION

14.1 DEPARTMENT OF TRANSPORTATION (DOT):

In accordance with DOT

Not applicable

14.2 TRANSPORT OF DANGEROUS GOODS:

Not applicable

14.3 TRANSPORT BY SEA:

Not applicable

14.4 AIR TRANSPORT:

Not applicable

15. REGULATORY INFORMATION

15.1 US FEDERAL REGULATIONS:

dimethyl sulfoxide (67-68-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
N-(n-butyl) thiophosphoric triamide (NBPT) - New (94317-64-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	PMN - PMN - indicates a commenced PMN substance. S - S - indicates a substance that is identified in a in a final Significant New Use Rule.

15.2 US STATE REGULATIONS:

COMPONENT	STATE OR LOCAL REGULATIONS
dimethyl sulfoxide (67-68-5)	U.S. - New Jersey - Right to Know Hazardous Substance List

16. OTHER INFORMATION

Full text of H-Statements:

H227	Combustible liquid
H315	Causes skin irritation.
H318	Causes serious eye damage.
H361	Suspected of damaging fertility or the unborn child.

NFPA health hazard:

1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard:

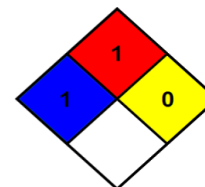
1 - Materials that must be preheated before ignition can occur.

NFPA reactivity

0 - Materials that in themselves are normally stable, even under normal conditions.

NFPA specific hazard:

None



16. OTHER INFORMATION (continued)**Hazard Rating**

Health:	1 - Slight Hazard - Irritation or minor reversible injury possible
Flammability:	1 - Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi-solids having a flash point above 200 °F (Class III B)
Physical:	0 - Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection:	C C - Safety glasses, Gloves, Synthetic apron

SDS VERSION: 5/22/2024

The information and recommendations contained in this Safety Data Sheet are understood to be correct by Van Diest Supply Company. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Information in this SDS follows different criteria from, and serves a different purpose than the product labeling.