VAN DIEST SUPPLY COMPANY

Distributor and Manufacturer of Agricultural Chemicals

SAFETY DATA SHEET

1. IDENTIFICATION

1.1 GHS PRODUCT IDENTIFIER:	**CORNBELT® VOLASTOP™**
1.2 ALTERNATE NAME(S):	None
1.3 RECOMMENDED USE/RESTRICTIONS:	Fertilizer
1.4 SUPPLIER'S DETAILS:	Van Diest Supply Company 1434 220th Street Post Office Box 610 Webster City, IA 50595-0610
1.5 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 APPEARANCE: Dark green liquid

2.2 PHYSICAL STATE: Liquid

2.3 ODOR: Sulfurous, ammonia-like odor

2.4 CLASSIFICATION:

Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 2
Reproductive toxicity	Category 1B

2.5 ODOR: Sulfurous, ammonia-like odor

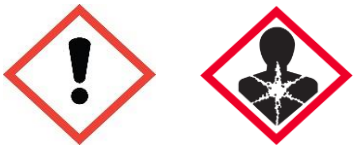
2.6 SIGNAL WORD: Danger

2.7 HAZARD STATEMENTS:

Causes severe skin burns and eye damage

Suspected of causing cancer

May damage fertility or the unborn child



2.8 PRECAUTIONARY STATEMENTS:

PREVENTION

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment as required.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash face, hands and any exposed skin thoroughly after handling.

RESPONSE

Immediately call a poison center or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center or doctor/physician.

2. HAZARDS IDENTIFICATION (continued)

2.8 PRECAUTIONARY STATEMENTS (continued):

RESPONSE (continued)

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a poison center or doctor/physician.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

STORAGE

Store locked up.

DISPOSAL

Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	% IN FORMULATION
Alkyl substituted sulfinyl	Proprietary	Proprietary
N-(n-butyl)-thiophosphoric triamide	94317-64-3	25-30%
Alkanolamine	Proprietary	Proprietary
Maleated polymer	Proprietary	Proprietary
Blue dye	Proprietary	Proprietary
Yellow dye	Proprietary	Proprietary

If Chemical Name/CAS Number is "proprietary" and/or % In Formulation is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

4.1 GENERAL FIRST AID RECOMMENDATIONS ARE AS FOLLOWS:

General Advice: Provide this SDS to medical personnel for treatment.

EYE CONTACT:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
SKIN CONTACT:	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a poison center or doctor/physician.
INHALATION:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
INHALATION:	Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

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

Symptoms — Causes severe skin burns and eye damage.

4.3 INDICATION OF NEED FOR IMMEDIATE MEDICAL ATTENTION:

Notes to Physician — Treat symptomatically.

5. FIREFIGHTING MEASURES

5.1 SUITABLE EXTINGUISHING MEDIA:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 UNSUITABLE EXTINGUISHING MEDIA:

Not determined.

5.3 SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

Not determined.

5. FIREFIGHTING MEASURES (continued)

5.4 PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:

As in any fire, wear a self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES:

Personal Precautions	Use personal protective equipment as required.

6.2 ENVIRONMENTAL PRECAUTIONS:

Environmental Precautions	See Section 12 for additional Ecological Information.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANUP:

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up	Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.
Incompatible Materials	None known based on information supplied.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 OCCUPATIONAL EXPOSURE LIMITS:

CHEMICAL NAME	ACGIH TLV	OSHA PEL	NIOSH IDLH
Alkanolamine	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m^3 (vacated) TWA: 3 ppm (vacated) TWA: 8 mg/m^3 (vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m^3	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m^3 STEL: 6 ppm STEL: 15 mg/m^3

8.2 ENGINEERING CONTROLS:

Apply technical measures to comply with the occupational exposure limits.

8.3 PERSONAL PROTECTIVE EQUIPMENT:

The following recommendations are suitable for small, incidental contact with this material. Recommendations for commercial or on-farm application of this chemical may be found on the container label.

EYE/FACE CONTACT:	Wear eye/face protection. Refer to to 29 CFR 1910.133 for eye and face protection regulations.
SKIN AND BODY PROTECTION:	Wear protective gloves and protective clothing. Refer to 29 CFR 1910.138 for appropriate skin and body protection.
RESPIRATORY PROTECTION:	Refer to 29 CFR 1910.134 for respiratory protection requirements.
GENERAL HYGIENE CONSIDERATIONS:	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Physical State	Liquid	**Odor**	Sulfurous, ammonia-like odor

9. PHYSICAL AND CHEMICAL PROPERTIES (continued)

Appearance	Dark green liquid	**Odor Threshold**	Not determined
Color	Dark green		

Property	**Values**
pH	10-11
Melting Point / Freezing Point	Not determined
Boiling Point / Boiling Range	Not determined
Flash Point	98°C / 208.4°F
Evaporation Rate	Not determined
Flammability (Solid, Gas)	Not determined
Flammability Limit in Air	
Upper flammability or explosive limits	Not determined
Lower flammability or explosive limits	Not determined
Vapor Pressure	Not determined
Vapor Density	Not determined
Relative Density	Not determined
Water Solubility	Not determined
Solubility in other solvents	Not determined
Partition Coefficient	Not determined
Autoignition Temperature	Not determined
Decomposition Temperature	Not determined
Kinematic Viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	Not determined
Oxidizing Properties	Not determined
Liquid Density	9.41 lb/gal

10. STABILITY AND REACTIVITY

10.1 REACTIVITY:

Nonreactive under normal conditions.

10.2 CHEMICAL STABILITY:

Stable under recommended storage conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:

None under normal processing.

10.4 CONDITIONS TO AVOID:

Keep out of reach of children.

10.5 INCOMPATIBLE MATERIALS:

None known based on information supplied.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON LIKELY ROUTES OF EXPOSURE:

Eye Contact	Causes severe eye damage.
Skin Contact	Causes severe skin burns.
Inhalation	Do not inhale.

11. TOXICOLOGICAL INFORMATION (continued)

11.1 INFORMATION ON LIKELY ROUTES OF EXPOSURE (continued):

Ingestion Do not ingest.

11.2 COMPONENT INFORMATION:

CHEMICAL NAME	ORAL LD_{50}	DERMAL LD_{50}	INHALATION LC_{50}
Alkyl substituted sulfinyl	= 14,500 mg/kg (Rat); = 28,300 mg/kg (Rat)	= 40 g/kg (Rat)	> 5.33 mg/L (Rat) 4 h
N-(n-butyl)-thiophosphoric triamide 94317-64-3	> 2,823 mg/kg (Rat)	> 2,000 mg/kg (Rabbit)	No data
Alkanolamine	= 1,720 mg/kg (Rat)	= 1 mL/kg (Rabbit); = 1,000 mg/kg (Rabbit)	No data
Blue dye	> 2 g/kg (Rat)	No data	No data
Yellow dye	> 2,000 mg/kg (Rat)	No data	No data

11.3 SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:

Symptoms Please see Section 4 of this SDS for symptoms.

11.4 DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT- AND LONG-TERM EXPOSURE:

Carcinogenicity Suspected of causing cancer.

Chemical Name	ACGIH	IARC*	NTP	OSHA
Blue dye	No data	Group 3	No data	No data

**** IARC (International Agency for Research on Cancer)***

Group 3 - Not Classifiable as to Carcinogenicity in Humans

11.5 REPRODUCTIVE TOXICITY:

Reproductive Toxicity May damage fertility or the unborn child.

11.6 NUMERICAL MEASURES OF TOXICITY:

The following values are calculated based on Chapter 3.1 of the GHS Document

Oral LD_{50}	6,016.20 mg/kg
Dermal LD_{50}	5,147.00 mg/kg
ATEmix (inhalation-dust/mist)	30.00 mg/L

12. ECOLOGICAL INFORMATION

12.1 ECOTOXICITY:

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.2 COMPONENT INFORMATION:

Chemical Name	Algae/Aquatic Plants	Fish	Crustacea
Alkyl substituted sulfinyl	12350 - 25500: 96 h *Skeletonema costatum* mg/L EC_{50}	34000: 96 h *Pimephales promelas* mg/L LC_{50}; 33 - 37: 96 h *Oncorhynchus mykiss* g/L LC_{50} static; 41.7: 96 h *Cyprinus carpio* g/L LC_{50}; 40: 96 h *Lepomis macrochirus* g/L LC_{50} static	7000: 24 h *Dapnhia* species mg/L EC_{50}
N-(n-butyl)-thiophosphoric triamide 94317-64-3		1140: 96 h *Lepomis macrochirus* mg/L LC_{50} static	

12. ECOLOGICAL INFORMATION (continued)

12.2 COMPONENT INFORMATION (continued):

Chemical Name	Algae/Aquatic Plants	Fish	Crustacea
Alkanolamine	15: 72 h *Desmodesmus subspicatus* mg/L EC_{50}	300 - 1000: 96 h *Lepomis macrochirus* mg/L LC_{50} static; 227: 96 h *Pimephales promelas* mg/L LC_{50} flow-through; 200: 96 h *Oncorhynchus mykiss* mg/L LC_{50} flow-through; 3684: 96 h *Brachydanio rerio* mg/L LC_{50} static; 114-196: 96 h *Oncorhynchus mykiss* mg/L LC_{50} static	65: 48 h *Daphnia magna* mg/L EC_{50}

12.3 PERSISTENCE/DEGRADABILITY:

Not determined

12.4 BIOACCUMULATION:

There is no data for this product.

12.5 MOBILITY:

Chemical Name	Partition Coefficient
Alkyl substituted sulfinyl	-2.03
Alkanolamine	-1.91

12.6 OTHER ADVERSE EFFECTS:

Not determined

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS:

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations

14. TRANSPORT INFORMATION

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

14.1 DOT:

UN/ID Number	UN1760
Proper Shipping Name	Corrosive Liquid, n.o.s. (contains alkanolamine)
Hazard Class	8
Packing Group	II

14.2 IATA:

UN Number	UN1760
Proper Shipping Name	Corrosive Liquid, n.o.s. (contains alkanolamine)
Transport Hazard Class	8
Packing Group	II

14.3 IMDG:

UN Number	UN1760

14. TRANSPORT INFORMATION (continued)

14.3 IMDG (continued):

Proper Shipping Name	Corrosive Liquid, n.o.s. (contains alkanolamine)
Transport Hazard Class	8
Packing Group	II

15. REGULATORY INFORMATION

15.1 US FEDERAL REGULATIONS:

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

16. OTHER INFORMATION

16.1 NFPA:

Health Hazards	Not determined
Flammability	Not determined
Instability	Not determined
Special Hazards	Not determined

16.2 HMIS:

Health Hazards	Not determined
Flammability	Not determined
Physical Hazards	Not determined
Personal Protection	Not determined

SDS VERSION: 5/25/2023

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.