

**1. IDENTIFICATION**

1.1 GHS PRODUCT IDENTIFIER: CORNBELT® SHEPHERD™ DRA 2.0

1.2 ALTERNATE NAME(S): None

1.3 CHEMICAL CLASS: Agricultural adjuvant.

1.4 ACTIVE INGREDIENT(S): A proprietary blend of water conditioning agents.

1.5 RECOMMENDED USE/RESTRICTIONS: Please see the label for specific recommendations regarding this product.

1.6 SUPPLIER'S DETAILS: Van Diest Supply Company
1434 220th Street
Post Office Box 610
Webster City, IA 50595-0610

1.7 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 HEALTH HAZARDS: Eye irritation Category 2B
Skin irritation Category 3

2.2 PHYSICAL HAZARDS: None Identified

2.3 ENVIRONMENTAL HAZARDS: None Identified

2.4 GHS LABEL ELEMENTS AND PRECAUTIONARY STATEMENTS:**HAZARDS:**

H316 Causes mild skin irritation.
H320 Causes eye irritation.

PREVENTION:

P272 Contaminated work clothing should not be allowed out of the work place.
P280 Wear protective gloves/eye protection/face protection.

RESPONSE:

P302+P352 IF ON SKIN: Wash with plenty of soap and 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.
P310 Immediately call a POISON CENTER or doctor/physician.

STORAGE:

No GHS storage statements

DISPOSAL:

P501 Dispose of contents and container in accordance with federal, state, and local regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is labeled with the following GHS Classifications, as it contains substances that present a hazard within the meaning of the relevant state and federal hazardous substances regulations. Some weight percentages and CAS numbers are being withheld as a Trade Secret.

MATERIAL	GHS CLASSIFICATION	CAS #	NOTES
Proprietary blend of water conditioning agents	Eye Irritation: 2B; H320	Proprietary	[1] [2]
	Skin Irritation: 3; H316		

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

This Safety Data Sheet is not a guarantee of product specification. Specific ingredient content may be found on the product label.

4. FIRST AID MEASURES

4.1 GENERAL FIRST AID RECOMMENDATIONS ARE AS FOLLOWS:

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

EYE CONTACT:	Hold eye open and rinse slowly and gently with clean water. Remove contact lenses after 5 minutes, if present, then continue rinsing eye for 15 minutes. Seek medical advice as appropriate.
SKIN CONTACT:	Remove contaminated clothing and clean skin thoroughly with soap and water. Wash contaminated clothing before reuse.
INGESTION:	Call a poison control center, physician, or hospital immediately for treatment advice as appropriate. Identify the name of the product, the type and amount of exposure, and symptoms the patient is experiencing. Do not induce vomiting unless told to do so by a poison control center, physician, or hospital. Do not give anything by mouth to an unconscious person.
INHALATION:	Remove to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration if possible.

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

No adverse symptoms or effects anticipated under normal handling conditions. See Section 2 - Hazards Identification for further details. Overexposure by contact may cause irritation to skin and eyes.

4.3 INDICATION OF NEED FOR IMMEDIATE MEDICAL ATTENTION:

If poisoning is suspected, or any symptoms are serious, immediately contact a poison control center, physician, or nearest hospital for instructions. Inform the contact of the name of the product, the type and amount of exposure, and symptoms the patient is experiencing. Repeated gross overexposure may cause injury to eyes and skin. Seek medical advice if severe or persistent eye or skin irritation occurs.

5. FIREFIGHTING MEASURES

5.1 SUITABLE EXTINGUISHING MEDIA:

Use any Class B fire extinguisher such as a multi-purpose dry chemical, CO₂, or foam extinguisher to extinguish a small fire in accordance with your company's established expectations.

5.2 UNSUITABLE EXTINGUISHING MEDIA:

Class-A only fire extinguishers, such as water-based extinguishers, are not ideal for small fires on this material. Do not use water jet.

5.3 SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of sulfur, nitrogen, and/or phosphorus may also be formed. Avoid breathing dust/fumes/gas/mist/vapors/spray.

5.4 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:

To fight larger fires, use full protective clothing and a self-contained breathing apparatus. Evacuate nonessential personnel from area to prevent exposure to fire, smoke, fumes, and/or products of combustion. Dike and collect water runoff.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES:

Using appropriate personal protective equipment specified in Section 8 - Exposure Control/Personal Protection, absorb any spilled material and place in a container for disposal. Disposal methods should be consistent with information in Section 13 - Disposal Considerations.

6.2 ENVIRONMENTAL PRECAUTIONS:

Do not allow spills to enter drains or watercourses.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANUP:

Ventilate the area and avoid breathing vapors and/or mists. Take the personal protective measures listed in Section 8 - Exposure Control/Personal Protection. Contain and absorb spillage with non-combustible materials such as sand, earth, and/or vermiculite. Place in closed containers outside buildings and dispose of according to the waste regulations (see Section 13 - Disposal Considerations). Clean, preferably with a detergent. Do not use solvents. Do not allow spills to enter drains or watercourses. If drains, sewers, streams, and/or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams, and/or lakes, the Environmental Protection Agency should also be informed.

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

Follow personal protective equipment recommendations as shown in Section 8 - Exposure Control/Personal Protection when handling this material, adjusted for specific handling methods and conditions, to prevent contact with this material. Wash thoroughly with soap and water after handling this material. Do not allow eating, drinking, tobacco use, and/or cosmetic application in areas where there is a potential for exposure to this material. Follow label instructions carefully.

7.2 CONDITIONS FOR SAFE STORAGE:

Store this product in a well-ventilated area in the original container. Secure material from access by children or domestic animals. Do not store this product near food, beverages, and/or tobacco products. Do not store with incompatible materials. Refer to Section 10 - Stability and Reactivity for incompatible materials.

8. EXPOSURE CONTROL/PERSONAL PROTECTION**8.1 OCCUPATIONAL EXPOSURE LIMITS:**

MATERIAL	CAS #	OSHA PEL	ACGIH TLV	CARCINOGEN		
				NTP	IARC	OSHA
Glycerol	56-81-5	15 mg/m ³ [1], TWA 5 mg/m ³ [2]	10 mg/m ³ [3], TWA 5 mg/m ³ [2]	No	No	No
Diethylene glycol	111-46-6	NA	NA	No	No	No

[1] Total dust

[2] Respirable Dust

[3] Mist

NA: Not Applicable

8.2 ENGINEERING CONTROLS:

Maintain air concentrations below occupational exposure standards using ventilation techniques as necessary.

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 CONTACT:	If splashing can be reasonably anticipated, for instance while pouring the product into another container, wear chemical splash goggles.
SKIN CONTACT:	Where skin contact is possible, wear a suitable barrier such as chemical resistant gloves and chemical apron. Skin should not be exposed. All parts of the body should be washed after contact.
INHALATION:	A respirator is not normally needed for the incidental handling of this product. For spills or other situations that may generate elevated levels of vapor or dust, use a suitable NIOSH-certified respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Hazy, colorless liquid
ODOR:	Mild
ODOR THRESHOLD:	ND
pH:	(Neat) 5.8 - 7.5
MELTING POINT:	ND
BOILING POINT:	ND
FLASH POINT:	>200° F CC
EVAPORATION RATE:	ND
FLAMMABILITY:	NA
UPPER/LOWER EXLOSIVE LIMIT:	ND
VAPOR PRESSURE:	ND
VAPOR DENSITY:	Heavier than air

9. PHYSICAL AND CHEMICAL PROPERTIES, continued

RELATIVE DENSITY:	ND
SOLUBILITY:	ND
PARTITION COEFFICIENT (<i>n</i> -Octanol/Water):	ND
AUTO-IGNITION TEMPERATURE:	ND
DECOMPOSITION TEMPERATURE:	ND
VISCOSITY:	>700 cps @ 68° F

ND: No Data; NA: Not Applicable

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

Non-reactive under normal conditions.

10.2 CHEMICAL STABILITY:

Stable under normal conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:

Not anticipated.

10.4 CONDITIONS TO AVOID:

Contact with incompatible materials and/or sources of ignition.

10.5 INCOMPATIBLE MATERIALS:

Strong oxidizers, strong acids, strong bases

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition will produce oxides of carbon and/or irritating/toxic fumes.

11. TOXICOLOGICAL INFORMATION**11.1 LIKELY ROUTES OF EXPOSURE:**

Overexposure may occur by inhalation, ingestion, and/or absorption.

11.2 SKIN CORROSION/IRRITATION:

Causes mild skin irritation.

11.3 SERIOUS EYE DAMAGE/IRRITATION:

This material causes eye irritation.

11.4 RESPIRATORY OR SKIN SENSITIZATION:

This material is not recognized as a sensitizer by OSHA.

11.5 GERM CELL MUTAGENICITY:

This material is not suspected of being mutagenic.

11.6 CARCINOGENICITY:

This material is not suspected of being a carcinogen.

11.7 REPRODUCTIVE TOXICITY:

This material is not suspected of being a teratogen.

11.8 STOT-SINGLE EXPOSURE:

Overexposure by vapor inhalation is unlikely under normal handling conditions.

11.9 STOT-LONG TERM EXPOSURE:

This material is not linked to long-term exposure effects.

11.10 ASPIRATION HAZARD:

This product does not meet the definition of an aspiration hazard.

11. TOXICOLOGICAL INFORMATION, continued**11.11 ACUTE TOXICOLOGY:**

INGESTION:	ORAL LD ₅₀
	>5,000 mg/kg
SKIN CONTACT:	DERMAL LD ₅₀
	>5,000 mg/kg
INHALATION:	INHALATION LC ₅₀ (DUST/MIST)
	>5.0 mg/L/4 hr
	INHALATION LC ₅₀ (VAPOR)
	>20.0 mg/L/4 hr

12. ECOLOGICAL INFORMATION**12.1 ECOTOXICITY:**

Ecotoxicity studies have not been conducted on this preparation.

12.2 PERSISTENCE AND DEGRADABILITY:

No data

12.3 BIOACCUMULATIVE POTENTIAL:

No data

12.4 MOBILITY IN SOIL:

No data

13. DISPOSAL CONSIDERATIONS

Do not allow into drains or watercourses. Wastes and emptied containers should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act. Using information provided in this Safety Data Sheet, advice should be obtained from the Waste Regulation Authority, whether the specific waste regulations apply. Dispose of contents in accordance with local and national regulations.

14. TRANSPORT INFORMATION**14.1 DOT CLASSIFICATION:**

DOT PROPER SHIPPING NAME:	Not regulated
DOT HAZARD CLASS:	Not applicable
DOT PACKING GROUP:	Not applicable
DOT LABEL:	None

15. REGULATORY INFORMATION

The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

15.1 EPCRA SARA TITLE III CLASSIFICATIONS:**EPCRA 311/312 CHEMICALS AND RQS (LBS) (>0.1%):**

Sulfuric acid (1,000.00)

EPCRA 302 EXTREMELY HAZARDOUS (>0.1%):

Sulfuric acid

EPCRA 313 TOXIC CHEMICALS (>0.1%):

Sulfuric acid (<0.6%)

16. OTHER INFORMATION

SDS VERSION: 12/29/22

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.