SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS: EMERGENCY TELEPHONE NUMBERS:

ALBAUGH, LLC (800) 424-9300 (CHEMTREC, transportation and spills)

Ankeny, IA 50021

PRODUCT NAME : **ENDOW**CHEMICAL NAME : Azoxystrobin
PRODUCT USE : Fungicide

PRODUCT CODE : EPA Reg. No 42750-261

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

Pure white liquid

HEALTH HAZARDS: Harmful if absorbed

through skin. Mild eye irritant.

PHYSICAL HAZARDS:

May release toxic fumes if burned.

ENVIRONMENTAL HAZARDS:

Very toxic to aquatic life.



SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUMBER
Azoxystrobin	22.9%	131860-33-8
Other ingredients	77.1%	N/A

SECTION 4 - FIRST AID MEASURES

First Aid responders should use protective equipment in Section 8 if there is a potential for exposure to product.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: No specific antidote. Treat symptomatically.

Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5 - FIRE FIGHTING MEASURES

National Fire Protection Rating (NFPA)

· · · · · · · · · · · · · · · · · · ·					
HEALTH					
FLAMMAB	ILITY				
REACTIVI	TY				
4=Severe	3=Serious	2=Moderate		1=Slight	0=Minimal

FLASHPOINT: >97.5°C (boiling temperature)

EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

FIRE AND EXPLOSION HAZARD: Can burn in fire, releasing irritating and toxic gases.

FIRE FIGHTING INSTRUCTIONS: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Dike and collect water used to fight fire to prevent environmental damage due to run off.

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full face piece.

Minimize use of water to prevent environmental contamination.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILLS OR LEAKS: Clean up spills immediately, observing precautions in Section 8 of this document. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

SMALL SPILL: Absorb small spills on sand, vermiculite or other inert absorbent. Place contaminated material in appropriate container for disposal.

LARGE SPILL: Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify, and scrape up for disposal. After removal, clean contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container.

Minimize use of water to prevent environmental contamination

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

HANDLING: Use only in a well-ventilated area. Do not reuse this container. Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate.

STORAGE: Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to the label.

Do not contaminate water, food or feed by storage and disposal.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 hour TWA, ppm):

COMPONENT	OSHA PEL	ACIGH TLV
Azoxystrobin	Not listed	Not listed

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to minimize exposure to airborne contaminants. Local mechanical exhaust ventilation may be required. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PERSONAL PROTECTIVE EQUIPMENT: Some materials that are chemically resistant to this product are listed below. If you want more options follow the instructions for Category A on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

EYE PROTECTION - Safety glasses, goggles or face shield

CLOTHING - Long-sleeved shirt and long pants, Shoes plus socks.

GLOVES - Chemical resistant gloves made of any waterproof material.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Pure white liquid

 $\begin{array}{lll} \textbf{Odorless} \\ \textbf{pH:} & 6.3-7.3 \\ \textbf{Melting Point:} & \text{Not applicable} \\ \textbf{Boiling Point:} & 97.5 ^{\circ}\text{C} \\ \textbf{Flash Point:} & >97.5 ^{\circ}\text{C} \\ \end{array}$

Evaporation Rate:Flammability:
No data
Not flammable
Flammability Limits:
Not applicable

Vapor Pressure: 1.1 x 10⁻⁷ mPa (20°C) (Azoxystrobin)

Vapor Density: Not applicable

Density: $1.05 - 1.09 \text{ g/ml } (8.76 - 9.10 \text{ lb/gl})^*$

Solubility: Emulsifies

Partition Coefficient: $\log Pow = 2.5 (25^{\circ}C) (Azoxystrobin)$

Auto-Ignition Temperature: No data **Decomposition Temperature:** No data

Viscosity: 56.28 mm²/s (20°C), 31.82 mm²/s (40°C)

^{*}Listed density is an approximate value and does not necessarily represent that of a specific batch.

SECTION 10 - STABILITY AND REACTIVITY

PRODUCT REACTIVITY: None known.

CHEMICAL STABILITY: Stable, however may decompose if heated.

HAZARDOUS REACTION/POLYMERIZATION: Product will not undergo polymerization.

CONDITIONS TO AVOID: Avoid temperatures above (115°F, 46°C) and high moisture.

INCOMPATIBLE MATERIALS: Acidic and oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen and carbon.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute toxicity values from a similar but not identical formulation.

ACUTE TOXICITY:

 $\begin{array}{lll} \text{Oral LD}_{50} \left(\text{rat} \right) &> 5,000 \text{ mg/Kg} \\ \text{Dermal LD}_{50} \left(\text{rat} \right) &> 4,000 \text{ mg/Kg} \\ \text{Inhalation LC}_{50} \left(\text{rat} \right) &> 4.0 \text{ mg/L} \\ \text{Eye Irritation (rabbit)} &\text{Mildly irritating} \\ \text{Skin Irritation (rabbit)} &\text{Slightly irritating} \\ \text{Sensitization (guinea pig)} &\text{Non-sensitizer} \end{array}$

CARCINOGEN STATUS:

OSHA Not listed NTP Not listed IARC Not listed

TERATOGENICITY: Developmental effects only seen at maternally toxic doses.

MUTAGENICITY: Weight of evidence indicates the azoxystrobin is non-mutagenic.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: This pesticide is toxic to freshwater and estuarine/marine fish and aquatic invertebrates. Do not apply directly to water except as specified on this label. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

Azoxystrobin and a degradate of azoxystrobin are known to leach through soil to ground water under certain conditions as a result of label use. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of azoxystrobin and a degradate of azoxystrobin from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

FATE: Azoxystrobin degrades rapidly in soil due to photolysis with a half-life of less than 30 days. Azoxystrobin is

ENDOW

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moderately mobile in soil.

FISH TOXICITY: (technical)

96 hour LC_{50} , Rainbow trout – 0.47 ppm 96 hour LC_{50} , Bluegill – 1.10 ppm

AVIAN TOXICITY: (technical)

Dietary LC₅₀, Bobwhite quail - > 5,200 ppm Dietary LC₅₀, Mallard duck - > 5,200 ppm

BEE TOXICITY: (technical) - > 200 ug/bee

SECTION 13 - DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

<u>Refillable container</u>: Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

If the container cannot be refilled, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Refer to the container label to determine if it is refillable and for complete cleaning and disposal instructions.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

SECTION 14 - TRANSPORT INFORMATION

SHIPPING DESCRIPTION: Not regulated by DOT for ground transport

(Ground transport)

TRANSPORT HAZARD CLASS: N/A
UN NUMBER: N/A
DOT PACKING GROUP: PG III

SECTION 15 - REGULATORY INFORMATION

CERCLA REPORTABLE QUANTITY: None

SARA TITLE III STATUS:

311/312 Hazard Categories – Acute Health

313 Toxic Chemicals – None

CALIFORNIA PROP 65: Not Listed

TSCA: This product is exempted from TSCA because it is solely for

FIFRA regulated use.

SECTION 16 - OTHER INFORMATION

HMIS HAZARD RATINGS	HEALTH			1		
	FLAMMABILITY		1			
	PHYSICAL I	HAZARD			0	
	4=Severe	3=Serious	2=M	oderate	1=Slight	0=Minimal

DISCLAIMER: The information presented herein is based on available data from reliable sources and is correct to the best of Albaugh's knowledge. Albaugh makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions.

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling.

It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

REVISED DATE: October, 2014

REFERENCE: Revised for GHS compliance