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 : CAPTAN 50WP

CHEMICAL NAME : Captan PRODUCT USE : Fungicide

PRODUCT CODE : EPA Reg. No 42750-235

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

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

Off-white powder

HEALTH HAZARDS: DANGER. Corrosive. Causes irreversible eye damage if not treated promptly. Harmful if swallowed. **PHYSICAL HAZARDS:**

Can decompose at high temperatures forming toxic gases.

ENVIRONMENTAL HAZARDS:

Highly toxic to fish.



SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUMBER	
Captan	50.0	133-06-2	
Inert ingredients	50.0	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 IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 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 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.

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.

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

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

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

CAPTAN 50WP

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SAFETY DATA SHEET SECTION 5 - FIRE FIGHTING MEASURES

National Fire Protection Rating (NFPA)

HEALTH			2	
FLAMMABILITY			0	
REACTIVITY			1	
4=Severe 3=Serious	2=Moderate		1=Slight	0=Minimal

FLASHPOINT: Will not flash.

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 such as hydrogen chloride, hydrogen cyanide, oxides of nitrogen, carbon monoxide. Dust could potentially form explosive mixture in air. Avoid dust formation.

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 facepiece.

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: Vacuum or sweep up material and place in a container for reuse or disposal.

LARGE SPILL: Avoid creating dust cloud. Vacuum or sweep up material and place in a container for reuse or disposal. Reduce airborne dust and prevent scattering by moistening with water. Pick up wash liquid with additional absorbent and place in a disposable container. After removal, flush contaminated area thoroughly with water.

Minimize use of water to prevent environmental contamination. Contact your State Pesticide or Environmental Control Agency, or nearest EPA Regional Office for guidance on disposal.

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

HANDLING: Use only in a well-ventilated area. Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate.

STORAGE: Keep pesticide in original container. Keep container tightly closed when not in use. Protect from excessive heat. Store in a cool, dry place.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 hour TWA):

COMPONENT	OSHA PEL	ACIGH TLV
Captan	Not listed	5 mg/m ³

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. 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: All mixers, loaders, applicators, and other handlers (including handlers participating in seeding and transplanting as part of root-dip or greenhouse-soil treatments) must wear:

- · Long-sleeved shirt and long pants
- Shoes plus socks
- · Protective eyewear
- Chemical-resistant gloves made of any waterproof material (except applicators driving motorized equipment) such as barrier laminate, butyl rubber, natural rubber, neoprene rubber, or nitrite rubber > 14 mils
- Chemical-resistant apron when participating in dip treatments
- A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH-approval number prefix TC-21C or a NIOSH-approved respirator with any N, R, P, or HE filter when mixing, loading, cleaning up spills, cleaning equipment, or otherwise exposed to the concentrate.

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: Off-white powder Odor: Faint odor pH: 7.2 - 8.2**Melting Point:** Not applicable **Boiling Point:** Not applicable Flash Point: Will not flash **Evaporation Rate:** No data Flammability: Not flammable

Flammability Limits: Not applicable Vapor Pressure: No data

Vapor Density: Not applicable

Density: $0.21 - 0.26 \text{ g/ml } (1.75 - 2.17 \text{ lb/gl})^*$

Solubility: No data
Partition Coefficient: No data
Auto-Ignition Temperature: No data
Decomposition Temperature: No data
Viscosity: No data

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

SAFETY DATA SHEET SECTION 10 - STABILITY AND REACTIVITY

PRODUCT REACTIVITY: Non-reactive

CHEMICAL STABILITY: Stable, however may decompose if heated.

HAZARDOUS REACTION/POLYMERIZATION: Product will not undergo polymerization.

CONDITIONS TO AVOID: Avoid temperatures below 25°F or above 115°F

INCOMPATIBLE MATERIALS: Acidic and oxidizing materials

HAZARDOUS DECOMPOSITION PRODUCTS:. Oxides of nitrogen and carbon

SECTION 11 - TOXICOLOGICAL INFORMATION

Results from tests performed on similar formulations.

ACUTE TOXICITY:

 $\begin{array}{lll} \text{Oral LD}_{50} \ (\text{rat}) & > 2,000 \ \text{mg/Kg} \\ \text{Dermal LD}_{50} \ (\text{rat}) & > 2,000 \ \text{mg/Kg} \\ \text{Inhalation LC}_{50} \ (\text{rat}) & > 0.5 \ \text{mg/L} \\ \text{Eye Irritation (rabbit)} & \text{Corrosive} \\ \text{Skin Irritation (rabbit)} & \text{Slight} \end{array}$

Sensitization (guinea pig) Potential sensitizer

CARCINOGEN STATUS:

OSHA Not listed NTP Not listed IARC Group 3

TERATOGENICITY: Studies have been inconclusive.

MUTAGENICITY: Weight of evidence indicates that captan is non-mutagenic

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: This pesticide is toxic to fish. 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 from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

FATE: Relatively non-mobile in soil with a half life of 1 - 10 days depending on soil type. Half life in water is < 1 day.

FISH TOXICITY: (technical)

96 hour LC₅₀, Rainbow trout – 35 ppb 96 hour LC₅₀, Bluegill – 75 ppb

AVIAN TOXICITY: (technical)

Oral LD_{50} , Bobwhite quail - > 2,000 mg/Kg Oral LD_{50} , Mallard duck - > 2,000 mg/Kg

BEE TOXICITY: (technical) - > 10 ug/bee

SAFETY DATA SHEET

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 of the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Refillable container. 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

Refer to the product label for additional and complete Container Handling instructions

SECTION 14 - TRANSPORT INFORMATION

DOT SHIPPING DESCRIPTION: UN 3077, Environmentally Hazardous Substance, Solid, N.O.S., 9,

PG III, RQ (captan)

TRANSPORT HAZARD CLASS: 9
UN NUMBER: 3077
DOT PACKING GROUP: III

SECTION 15 - REGULATORY INFORMATION

CERCLA REPORTABLE QUANTITY: 10 lbs (20 lbs of product)

SARA TITLE III STATUS:

311/312 Hazard Categories – Immediate and Delayed Health

313 Toxic Chemicals – Yes (captan)

CALIFORNIA PROP 65: Listed

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

FIFRA regulated use.

SECTION 16 - OTHER INFORMATION

HMIS	HEALTH				2	
HAZARD PH	FLAMMABIL	ITY			0	
	PHYSICAL H	HAZARD		1		
	4=Severe	3=Serious	2=Mod	lerate	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: September, 2014

REFERENCE: Upgrade for GHS compliance