

## SAFETY DATA SHEET

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### SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

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**Product Name:** Agri Star MCPA Ester 500

**PCP Reg. No.:** 27860

**Product use:** Herbicide

**Supplier's name and address:**

Albaugh, LLC  
1525 NE 36<sup>th</sup> St.  
Ankeny, IA 50021  
1-800-247-8013

**Emergency Telephone #:**  
1-800-424-9300 (CHEMTREC)

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### SECTION 2 — HAZARDS IDENTIFICATION

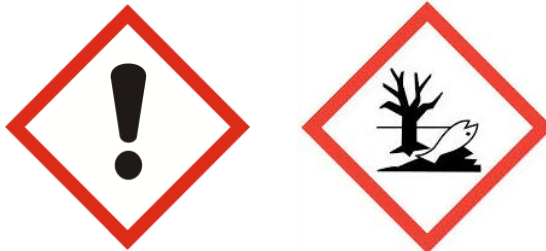
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**Physical Hazards:** None  
**Health Hazards:** Acute Toxicity (Oral) ..... Category 4  
Acute Toxicity (Inhalation) ..... Category 4  
Acute Toxicity (Dermal) ..... Category 5

**Environmental Hazards:** Hazardous to aquatic environment, acute - Category 1

**Signal Word:** WARNING

**Hazard Statements:** Harmful if swallowed. Harmful if inhaled. May be harmful in contact with skin. Very toxic to aquatic life.



**Precautionary Statements:** May be harmful in contact with skin. Avoid contact with skin, eyes and clothing. After use, wash hands and other exposed skin. Wear a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. Rinse gloves before removal. Remove and wash contaminated clothing before reuse. Harmful if swallowed. Do not eat, drink or smoke when using this product. Avoid breathing spray mist. Use only outdoors or in a well-ventilated area. This product contains an active ingredient and petroleum distillates which are toxic to aquatic organisms.

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### SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

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Hazardous Component	CAS No.	Percentage (%)
MCPA 2-ethylhexyl ester	29450-45-1	46-49
Petroleum distillates (contains)*	64742-94-5	14-15
*Naphthalene	91-20-3	1.5-2.5

Other ingredients are considered non-hazardous.

Content Listed on Product Label
MCPA, present as 2-ethylhexyl ester ..... 500 g a.e./L

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### SECTION 4 — FIRST AID MEASURES

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**If Swallowed:** call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person

**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.

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

**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 centre or doctor for treatment advice.

Take the container, label or product name and Pest Control Product Registration Number with you when calling a poison control center or doctor or going for treatment.

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### SECTION 5 — FIRE FIGHTING MEASURES

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**Extinguishing Media:** Water fog, alcohol foam, carbon dioxide, dry chemical.

**Special Firefighting Procedures:** Firefighters should wear self-contained breathing apparatus and full protective clothing when fighting chemical fires. Minimize and contain water runoff.

**Flash Point:** .....>100 °C

**Conditions of Flammability:** .....Not classified as a combustible liquid, but may burn under fire conditions.

**Hazardous Decomposition Products:** ...Under fire conditions, may produce gases such as hydrogen chloride, nitrogen oxides and carbon oxides.

**National Fire Protection Association (NFPA) Hazard Rating:**

**Rating for this product:**      **Health: 2**                      **Flammability: 1**                      **Reactivity: 0**

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

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### SECTION 6 — ACCIDENTAL RELEASE MEASURES

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Use safety equipment and procedures appropriate to the size of the spill. Keep unnecessary people away. Avoid runoff to natural waters and sewers. Surround and absorb spills with inert material such as perlite, sawdust, clay granules, vermiculite, sand or dirt. Contain all affected material in a closed, labeled container for proper disposal. Isolate from other waste materials. Clean contaminated area such as hard surfaces with detergent and water, collecting cleaning solution for proper disposal. Large spills to soil or similar surfaces may necessitate removal of top soil.

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## SECTION 7 — HANDLING AND STORAGE

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**Handling:** Avoid contact with skin, eyes and clothing. After use, wash hands and other exposed skin. Wear a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. Rinse gloves before removal. Remove and wash contaminated clothing before reuse. Avoid breathing spray mist. Do not eat, drink or smoke when using this product.

**Storage:** Store the container tightly closed away from seeds, fertilizer, plants and foodstuffs. May be stored at any temperature. Shake well before using.

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## SECTION 8 — EXPOSURE CONTROLS AND PERSONAL PROTECTION

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**Control Parameters:**

Component	TWA*	STEL*	Note
MCPA 2-ethylhexyl ester	N/E	N/E	None found
Petroleum distillates (contains)*	1200 mg/m <sup>3</sup>	N/E	Supplier recommendation
*Naphthalene	-	-	-

\*Time Weighted Average, 8-hour unless otherwise noted

\*\*Short Term Exposure Level

N/E – Not Established

**Engineering Controls:** Use only outdoors or in a well-ventilated area.

**Personal Protective Equipment:** Wear a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. Rinse gloves before removal. Applicators using a closed cab are not required to wear chemical resistant gloves. The field crew and the mixer/loaders must wear long-sleeved shirt, long pants and coveralls, chemical resistant gloves and goggles or face shield during mixing/loading, cleanup and repair.

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## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

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**Note:** Physical data are typical values but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

**Physical state and appearance:** ..... Clear dark red liquid  
**Odor:** ..... Slight aromatic and phenolic  
**Odor Threshold:** ..... No data  
**pH:** ..... 3.8 to 4.0 (1% aqueous solution)  
**Melting Point:** ..... No data  
**Freezing Point:** ..... < 32°F/ 0°C  
**Boiling Point:** ..... No data  
**Flash Point:** ..... >100°C  
**Evaporation Rate:** ..... No data  
**Flammability:** ..... No data  
**Explosive Limits:** ..... No data  
**Vapor Pressure:** ..... No data  
**Vapor Density:** ..... No data  
**Density:** ..... 1.00 to 1.04 g/cm<sup>3</sup> @ 68°F/20°C  
**Solubility:** ..... In water: Emulsifies  
**Partition Coefficient:** ..... No data  
**Auto Ignition Temperature:** ..... No data  
**Decomposition Temperature:** ..... No data  
**Viscosity:** ..... No data

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## SECTION 10 — STABILITY AND REACTIVITY

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**Reactivity:** Not reactive

**Chemical Stability:** Stable under normal handling and storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Excessive heat. Do not store near heat or flame

**Incompatible Materials:** Avoid contact with strong acidic, basic or oxidizing agents.

**Hazardous Decomposition Products:** Under fire conditions, may produce gases such as hydrogen chloride, nitrogen oxides and carbon oxides.

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## SECTION 11 — TOXICOLOGICAL INFORMATION

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This section is intended for use by toxicologists and other health professionals. Data obtained on similar products and on components are summarized below.

Acute oral toxicity Rat, LD50: ..... >1,000 mg/Kg

Acute dermal toxicity Rabbit, LD50: ..... >2,000 mg/Kg

Acute inhalation toxicity Rat, LD50: ..... >2.5 mg/L

Skin irritation Rabbit: ..... Moderate

Eye irritation Rabbit: ..... Moderate to severe

Skin sensitization Guinea Pig: ..... Potential sensitizer

Mutagenicity: ..... Mixed results in animal studies but weight of evidence indicate that MCPA is not mutagenic.

Chronic effects/carcinogenicity: ..... IARC – 2B (chlorophenoxy herbicides)

Toxicity to reproduction/fertility: ..... Animal studies have noted testicular effects and lower male fertility

Developmental toxicity/teratogenicity: ..... Animal studies have noted decreased fetal body weights at doses toxic to mother animals.

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## SECTION 12 — ECOLOGICAL INFORMATION

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This section is intended for use by eco-toxicologists and other environmental specialists. Data obtained on similar products and on components are summarized below.

### Ecotoxicity: (Technical)

#### Aquatic Toxicity:

Rainbow trout: ..... 96-Hour LC<sub>50</sub> (mg/L).....3.2

Bluegill sunfish: ..... 96-Hour LC<sub>50</sub> (mg/L) .....>3.2

Daphnia: ..... 48-Hour EC<sub>50</sub> (mg/L) ..... 0.28

Algae: Selenastrum ..... 20-Hpur EC<sub>50</sub> (mg ae/L)..... 0.25

Algae: Navicula ..... 120-Hpur EC<sub>50</sub> (mg ae/L).....1.25

Algae: Skeletonema ..... 120-Hpur EC<sub>50</sub> (mg ae/L)..... 0.085

#### Avian toxicity

Bobwhite quail: ..... Oral LD<sub>50</sub> (mg/kg)..... >2250

..... Dietary LDD<sub>50</sub> (mg ae/kg bw/d).....>3800

Mallard duck: ..... Dietary LDD<sub>50</sub> (mg ae/kg bw/d).....>930

#### Arthropod toxicity:

Honey bee: ..... LD<sub>50</sub> >210 µg 500 g/L MCPA 2EH formulation/bee (contact)

..... LD<sub>50</sub> >250 µg 500 g/L MCPA 2EH formulation/bee (oral)

**Soil organism toxicity, invertebrates:**

Earthworm:..... No data

**Persistence and Degradability:** MCPA 2EH rapidly hydrolyzes to parent MCPA acid. MCPA is microbially degraded with typical half-life (ester and acid) of 5 to 20 days. Persistent in anaerobic environments.

**Bioaccumulation Potential:** Negligible.

**Mobility in Soil:** Moderate to high mobility potential, but rapidly degraded.

**Other Adverse Effects:** No data.

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### SECTION 13 — DISPOSAL CONSIDERATIONS

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For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Disposal should be made in accordance with federal, provincial and local regulations.

Do not reuse container for any purpose. If applicable, return container in accordance with return program. If a recyclable container, dispose of at a container collection site. Contact local distributor, dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site, triple or pressure rinse the empty container adding rinsings to spray tank, and make container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

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### SECTION 14 — TRANSPORTATION INFORMATION

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The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

**CANADA:**

**TDG Classification – Road/Rail:**

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (MCPA Ester), Class 9, PG III, Marine Pollutant.

Section 1.45.1 of the TDG Regulations provides an exemption from documentation and safety marks only for this product and only when transported by a road or railway vehicle.

**UNITED STATES:**

**DOT Classification:**

< 119 gallons per complete package  
Non-Regulated

≥ 119 gallons per complete package

NA 3082, Environmentally hazardous substance, liquid, n.o.s. (MCPA Ester), 9, III Marine Pollutant

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### SECTION 15 — REGULATORY INFORMATION

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This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. Following is the hazard information required on the pest control product label:



CAUTION POISON  
DANGER - CORROSIVE TO EYES  
SKIN IRRITANT  
POTENTIAL SKIN SENSITIZER

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## SECTION 16 – OTHER INFORMATION

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This Safety Data Sheet (SDS) is designed to comply with the Globally Harmonized System (GHS) of chemical hazard classification. The information given here is not necessarily exhaustive but is representative of relevant, reliable data. Follow all local/regional/national/international regulations.

**HMIS Rating:** 2 Health; 1 Flammability; 0 Reactivity

0 = Minimal hazard, 1 = Slight hazard, 2 = Moderate hazard, 3 = Severe hazard, 4 = Extreme hazard

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE Pest Management Regulatory (PMRA)- APPROVED PRODUCT LABELING (attached to and accompanying the product container). This MSDS 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 product labeling and provincial legislation, 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 PMRA-approved label.

**Prepared by:** Albaugh, LLC

**Preparation date:** 04/10/2019

**Revision date:** 04/10/2019

**Revised For:** Modified section 3 and 8 to include solvent amount.