



SAFETY DATA SHEET (SDS) ID: EPA Reg. No. 74530-69, HELMSTAR PLUS SC

SECTION 1: Product and Company IDs

Product name: HELMSTAR PLUS SC
Product use / type: Fungicide
Restrictions on use: See product label.
SDS ID: EPA Reg. No.: 74530-69 HELMSTAR PLUS SC
Chemical name / active ingredients:

- Tebuconazole: a-[2-(4-chlorophenyl)ethyl]-a-(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol
- Azoxystrobin: Methyl (E)-2-[2-[6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl]-3-methoxyacrylate

Manufacturer / Registrant Info:

HELM Agro US, Inc. 401 E. Jackson St.
Suite 1600, Tampa, FL 33602
(813)-621-8846, info@helmagro.com

Chemical Emergency Number: 1-800-424-9300 (Chemtrec)

SECTION 2: Hazard Communication

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

Signal Word: Danger

Pictograms:



Acute Toxicity (Ingestion):

Category 3

Reproductive Toxicity:

Category 2

Hazard Statements:

- Toxic if swallowed
- Suspected of damaging fertility or the unborn child

Precautionary Statements:

- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
- Avoid breathing dust/fume/gas/mist.
- Wear protective gloves / clothing / eye and face protection
- Wash hands and face thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- If exposed or concerned: Get medical advice / attention.
- IF SWALLOWED: Rinse mouth thoroughly. Immediately call a poison control center.
- Store locked up. Dispose of contents / container in accordance with local regulations.

Other Information / Potential Hazards:

- May cause eye irritation.
- Very toxic to aquatic life with long lasting effects.
- See section 15.

SECTION 3: Ingredient Composition

Chemical Name	CAS #	% Composition (exact values may be withheld as trade secrecy)
Tebuconazole: a-[2-(4-chlorophenyl)ethyl]-a-(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol	107534-96-3	22.0
Azoxystrobin: Methyl(E)-2-[2-[6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl]-3-methoxyacrylate	131860-33-8	11.0
Other:	N/R as trade secrecy	67.0

SECTION 4: First Aid Measures

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 on skin or clothes: Remove contaminated clothing and shoes. Rinse skin immediately with plenty of water for 15 or 20 minutes. Call a poison control center or doctor for 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 center or doctor for treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or get medical help, then give artificial respiration, preferably with the aid of a pocket mask equipped with a one-way valve. Call a poison control center or doctor for further treatment advice.

First Aid Note: Have this safety data sheet, the product container or label with you when calling a poison control center or doctor or going for treatment.

Note to Physician: No antidote available. Treat symptomatically.

SECTION 5: Fire Fighting Measures

Flammable properties: Not flammable. **Extinguishing media:** Water fog, dry chemical, alcohol resistant foam or CO₂. **Unsuitable extinguishing media:** High pressure water streams. **Firefighting measures:** Use extinguishing media appropriate for surrounding fire. Prevent contaminated firefighting waters and spillage from entering sewers, drains and waterways. Foam or dry chemical are preferred to minimize environmental contamination. **Protective equipment and precautions for firefighters:** Wear full protective firefighting gear including self-contained breathing apparatus pressure demand (MSHA/NIOSH approved or equivalent). **Hazardous decomposition products:** Thermal decomposition may release oxides of carbon and nitrogen and irritating and toxic vapors. Hydrogen cyanide and hydrogen chloride can be released.

SECTION 6: Accidental Release Measures

Personal precautions: Isolate and post spill area. Wear protective gloves / clothing and eye protection. Avoid contact with eyes, skin and clothing. Ensure adequate ventilation. See section 8 for personal protective equipment.

Environmental precautions: Prevent further spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Avoid release into the environment.

Methods for containment: Isolate the spill area. Contain small spill with inert material (e.g., sand, silica gel, binder). Dike large spill with absorbent or impervious material such as clay. **Methods for cleanup:** Pick up absorbent material by shovel and transfer to properly labeled containers for disposal.

SECTION 7: Handling and Storage

Precautions for safe handling: Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Avoid contamination of work clothing.

Precautions for safe storage: Store and handle in accordance with good industrial hygiene practices. Keep container tightly closed. Store in a cool, dry and well-ventilated place away from children and animals. **Incompatible storage situations:** Separate pesticides during storage to prevent cross-contamination of other pesticides, fertilizers, food, water, and feed.

SECTION 8: Exposure Control / Protection

The following recommendations for exposure controls and personal protection are intended for the manufacture, formulation, and packaging of this material. All forms of application should refer to the product label for personal protection equipment. **Exposure Guidelines:** This product does not contain hazardous substances with occupational exposure limits established by the region-specific regulatory bodies. **Engineering controls:** Emergency eye wash / drench near work area. Emergency shower or suitable water supply near the work area. Ensure adequate ventilation, especially in confined areas. **Personal protective equipment:** **Eye / face protection:** Wear chemical-tight goggles or safety glasses and full face-shield. **Body / skin protection:** Long sleeved shirt, long pants, shoes plus socks. Wash contaminated work clothing before reuse. **Hand protection:** Wear chemical resistant gloves / hand protection. Wash outside of gloves before removing. **Respiratory protection:** If exposure limits are exceeded or irritation is experienced, a NIOSH/MSHA approved respiratory protection should be worn. Positive pressure supplied air respirators may be required for high airborne contaminant concentrations. Use respiratory equipment in accordance with local regulations. **General hygiene considerations:** Handle in accordance with good industrial hygiene practice. Remove and wash contaminated clothing before reuse. Launder separate from household laundry.

SECTION 9: Physical & Chemical Properties

Physical state: Liquid. **Appearance:** Bright white. **Odor:** Plastic-like. **pH:** 6.6 – 6.7 (1% w/w aqueous suspension at 20° C). **Melting point:** Not applicable.



Boiling point: No information available. **Flash point:** Not flammable. **Relative density:** 1.09 g/ml at 20° C. **Water solubility:** Miscible. **Viscosity:** No information available. **n-Octanol / water partition coefficient:** **Tebuconazole:** log Pow 3.44 at 20° C **Azoxystrobin:** log Pow 2.0 at 25° C

SECTION 10: Stability & Reactivity

Reactivity / chemical stability: Stable under normal temperature and conditions. **Conditions / Materials to avoid:** Extreme heat, sparks and fire. Incompatible with strong oxidizing agents. **Hazardous decomposition products:** Under fire conditions may evolve oxides of carbon and nitrogen. **Hazardous reactions:** Not expected under normal conditions of handling/use.

SECTION 11: Toxicological Information

Information on likely routes of exposure: **Inhalation:** No information available **Ingestion:** Toxic if swallowed. **Eye contact:** May cause eye irritation and/or temporary burning. **Skin contact:** No information available. **Information on product toxicological effects:** **Acute oral LD50:** Rat LD50: 300 mg/kg. **Acute dermal LD50:** Rat LD50: >2000 mg/kg. **Acute inhalation LC50:** Rat 4-hr LC50: >5.12 mg/L. **Eye irritation:** Moderately irritating (rabbit). **Skin irritation:** Non-irritating (rabbit). **Sensitization:** Not a sensitizer. **Carcinogenicity:** No component of this product present at levels greater than or equal to 0.1% is listed with NTP, IARC or OSHA. **Reproductive effects (Tebuconazole):** Suspected of damaging fertility or the unborn child. **Mutagenic effects:** Not mutagenic.

SECTION 12: Ecological Information

Environmental Hazards: Very toxic to aquatic organisms with long lasting effects. Keep out of any body of water. **Ecotoxicity: Tebuconazole:** 96-hr LC50: 4.4 mg/L *Onchorhynchus mykiss*, 48-hr EC50: 2.0 mg/L *Daphnia magna*, 72-hr EC50: 3.2 mg/L *Pseudokirchneriella subcapitata*. **Azoxystrobin:** 96-hour LC50: 0.47 ppm *Onchorhynchus mykiss*, 48-hour EC50: 259 ug/L *Daphnia magna*. **Persistence and degradability:** N/A. **Bioaccumulation:** N/A.

SECTION 13: Disposal Information

Product disposal: Wastes resulting from the use of this product that cannot be used must be disposed in accordance with applicable Federal, State or local regulations at an approved waste disposal facility. **Container disposal:** Emptied container retains product residue. Observe all labeled safeguards until container is destroyed or offered for recycling. Clean container promptly after emptying. Refer to container label for additional information.

SECTION 14: Transport Information

Not subject to U.S. DOT regulation in packages less than or equal to 119 gallons (450 liters). U.S. DOT for packages greater than 119 gallons (450 liters), IMDG, IATA: UN3082, Environmentally hazardous substance, liquid, n.o.s. (Tebuconazole, Azoxystrobin), 9, III, Marine Pollutant.

SECTION 15: Regulatory Information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label: **Signal word:** Warning. **EPA Registration No.:** 74530-69 **Hazards to Humans and Domestic Animals.** May be fatal if swallowed. Harmful if absorbed through skin or inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash before reuse. **Environmental Hazards.** This pesticide is toxic to mammals, fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate. **Ground Water Advisory:** Azoxystrobin can be persistent for several months or longer. Azoxystrobin has degradation products which have properties similar to chemicals which are known to leach through soil to ground water under certain

conditions as a result of agricultural use. Tebuconazole is known to leach through soil into ground water under certain conditions as a result of label use. Therefore, use of **HELMSTAR PLUS SC** in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. **Surface Water Label Advisory:** This product may contaminate water through drift of spray in wind. This product has high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to runoff that contains this product. 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 for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted within 48 hours. Notify state and/or Federal authorities and Helm Agro US Inc., immediately if you observe any adverse environmental effects due to use of this product. Read product label and any advisories. **EPA Registration No.:** 74530-69.

SARA 311/312: Acute, Chronic Health Hazard. **SARA 313:** None listed. **CERCLA:** None Listed. **State Right-to-Know Regulations:** This product is not subject to state Right-to-Know regulations. **California Proposition 65:** This product does not contain substances known to the state of California to cause cancer and/or reproductive/developmental effects.

SECTION 16: Other Information

NFPA Ratings:	NFPA Ratings:	NFPA Ratings:	NFPA Ratings:
Health	Fire	Instability	
2	0	0	

Acronyms which may or may not be referenced: ACGIH - American Conference of Governmental Industrial Hygienists; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CFR - Controlled Products Regulations; CST - Centistokes; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; FIFRA - Federal Insecticide, Fungicide and Rodenticide Act; GHS - Global Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MP - Marine Pollutant; NFPA - National Fire Protection Association; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

Revision Date: August 28th, 2023. **Revision no. 1**
Reason for Revision: SDS review and truncate. Confirm/Update Section 14. Review and/or update Section 15 (PRN 2012-1). Address change.

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