



# SAFETY DATA SHEET (SDS) ID: EPA Reg. No. 74530-99, HELMET MAXX

## SECTION 1: Product and Company IDs

**Product name:** HELMET MAXX  
**Product use / type:** Herbicide  
**Restrictions on use:** See product label.  
**SDS ID:** EPA Reg. No.: 74530-99  
**Chemical name / active ingredients:**

- Metolachlor, CAS# 51218-45-2
- Atrazine, CAS# 1912-24-9
- Mesotrione, CAS# 104206-82-8

**Manufacturer / Registrant Info:**  
 HELM Agro US, Inc. 401 E. Jackson St.  
 Suite 1600, Tampa, FL 33602  
 (813)-621-8846, [info@helmagro.com](mailto:info@helmagro.com)  
**Chemical Emergency Number:** 1-800-424-9300 (Chemtrex)

## SECTION 2: Hazard Communication

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).  
**Signal Word:** Warning. **Pictograms:**



**Eye damage / irritation:** Category 2B  
**Skin sensitization:** Category 1  
**Specific target organ toxicity – repeat exposure:** Category 2

### Hazard Statements:

- May cause an allergic skin reaction.
- Causes eye irritation.
- May cause damage to kidney or liver through prolonged or repeated exposure.

### Precautionary Statements:

- Do not eat drink or smoke when using this product.
- Do not breathe dust/fumes/gas/mist/vapors/spray.
- Wash thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective gloves/eye/clothing and face protection.
- **See Section 4: IF SWALLOWED, IF ON SKIN: IF INHALED: IF IN EYES:** Call POISON CENTER or doctor if you feel unwell.
- Do not induce vomiting.
- If eye irritation persists: Get medical attention/advice.
- Wash contaminated clothing before reuse.
- Store locked up. Dispose of contents/container in accordance with local/state/federal regulations. See Sections 7 & 13.

### Other Information / Potential Hazards:

- May cause slight skin irritation. May be harmful if swallowed.
- Very toxic to aquatic life with lasting effect.
- See sections 4 & 15.

## SECTION 3: Ingredient Composition

Chemical Name	CAS #	% Composition (**exact values may be withheld as trade secrecy)
Metolachlor	51218-45-2	=19
Atrazine	1912-24-9	=18.61
Mesotrione	104206-82-8	=2.44
Related active trazine compounds	Proprietary**	+/- 0.48
Other:	N/R as trade secrecy**	+/- 59.48

## 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:** Wash and remove contaminated clothing and shoes. Rinse skin immediately with plenty of water for 15 or 20 minutes. Call a poison control center/doctor for treatment advice. May sensitize. Sensitized persons should avoid reuse. **If in eyes:** May cause redness and tearing. 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. Protect self. **Physician:** Protect self from material. Treat symptomatically.

## SECTION 5: Fire Fighting Measures

**Flammable properties:** N/A. **Extinguishing media:** Dry chemical, CO<sub>2</sub>, water spray, alcohol resistant foam. **Unsuitable extinguishing media:** None. **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). Decontaminate equipment after use. **Hazardous decomposition products:** Thermal decomposition can lead to release of irritating and toxic gases and vapors. **Hazardous combustion products:** Carbon oxides. Nitrogen oxides (NO<sub>x</sub>). Oxides of sulfur. **Explosion data:** No sensitivity to mechanical impact nor to static discharge.

## SECTION 6: Accidental Release Measures

**Personal precautions:** Evacuate, 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. Keep spill/leak away from upwind. **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. If spill is on soil near desirable trees or plants remove contaminated soil after initial clean-up. **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 or suitable non-combustible material. **Methods for cleanup:** Pick up and transfer to properly labeled containers for disposal. Thoroughly clean tools and contaminated surfaces with detergent and water. Place rinse waters into disposal containers. Place leaking containers in oversize drums for transport and disposal.

## SECTION 7: Handling and Storage

**Precautions for safe handling:** Wear protective attire. Use only with adequate ventilation. Avoid breathing vapor or mists. 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 and do not reuse. Store in a cool, dry and well-ventilated place away from children and animals. Do NOT reuse container. **Incompatible storage situations:** Separate pesticides during storage to prevent cross-contamination of other pesticides, fertilizers, food, water, feed. Do not reuse container. Incompatible with strong oxidizing agents.

## SECTION 8: Exposure Control / Protection

Chemical Name	ACGH TLV	OSHA PEL	NIOSH IDLH
Atrazine 1912-24-9	TWA: 2 mg/m <sup>3</sup> inhalable fraction	-	TWA: 5 mg/m <sup>3</sup>

NIOSH IDLH Immediately Dangerous to Life or Health

**Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Ensure showers and eyewash stations, and ventilation systems. **Eye/face protection:** Wear safety glasses with side shields (or goggles). **Skin and body protection:** Wear suitable protective clothing. Wear protective butyl rubber gloves. Protective shoes or boots. **Respiratory protection:** Ensure adequate ventilation, especially in confined areas. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. **General Hygiene Considerations:**



When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs. Wash contaminated clothing before reuse.

### SECTION 9: Physical & Chemical Properties

**Physical state:** Liquid.

**Appearance:** Opaque. **Odor:** Mild. **pH:** 3.32. **Melting pt. & boiling pt.:** N/A. **Flash point:** >212° F / 100° C (Closed cup). **Relative density:** 1.07 g/ml at 20° C. **Water solubility:** Dispersible. **Viscosity:** No info available. **Vapor pressure:** ~17mm Hg at 20° C. **n-Octanol / water partition coefficient:** Not listed. **Explosion:** Not an explosive. **Oxidizing properties:** N/A. **Other as commonly listed:** N/A.

### SECTION 10: Stability & Reactivity

**Reactivity / chemical stability:** Stable under normal temperature and conditions. **Conditions / Materials to avoid:** Extreme heat, sparks and fire. Storage near reactive materials. Strong oxidizing agents. **Hazardous decomposition products:** Thermal decomposition can lead to release of irritating and toxic gases and vapors. Nitrogen oxides (NOx). Carbon oxides. **Hazardous reactions:** Not expected under normal use.

### SECTION 11: Toxicological Information

See Section 4 for information on likely routes of exposure and effects. **Product Information:**

**Acute Oral LD50 (rat):** >2000 mg/kg. **Acute Dermal LD50 (rabbit):** > 2000 mg/kg. **Eye Irritation (rabbit):** Moderately irritating. **Skin Irritation (rabbit):** Mildly irritating. **Inhalation LC50 (rat):** >5.12 mg/L (4 HR). **Skin Sensitization:** (guinea pig): Sensitizer. **Metolachlor, CAS# 51218-45-2, Oral LD50:** >2000 mg/kg (rat). **Dermal LD50:** >2000 mg/kg (rabbit). **Inhalation LC50:** >3.20 mg/L (rat). **Atrazine, CAS# 1912-24-9, Oral LD50:** 672 mg/kg (Rat). **Dermal LD50:** > 5000 mg/kg (Rat); = 7500 mg/kg ( Rabbit ); > 2000 mg/kg (Rat). **Inhalation LC50:** 5200 mg/m<sup>3</sup> (Rat) 4 h. **Related active triazine compounds, Oral LD50:** 1390 mg/kg (Rat). **Dermal LD50:** > 1 g/kg (Rat). **Inhalation LC50:** 1563 g/m<sup>3</sup> (Rat) 1 h. **Other ingredients, Oral LD50:** > 90 mL/kg ( Rat ). Delayed and immediate effects as well as chronic effects from short and long-term exposure. **Sensitization:** May cause sensitization in susceptible persons. **Germ cell mutagenicity:** Based on available data, the classification criteria are not met. **Carcinogenicity:** Based on available data, the classification criteria are not met; however, see here: **Atrazine, CAS # 1912-24-9, is listed by ACHIG, A3 - Animal Carcinogen; IARC, Group 3, Not classifiable as a human carcinogen; Atrazine is not listed with NTP or OSHA. Reproductive toxicity:** Based on available data, the classification criteria are not met. **STOT - single exposure:** Based on available data, the classification criteria are not met. **STOT - repeated exposure:** Causes damage to organs through prolonged or repeated exposure. **Chronic toxicity:** May cause adverse liver effects. **Target Organ Effects:** Central nervous system, Eyes, Liver, Respiratory system, Skin. **Aspiration hazard:** Based on available data, the classification criteria are not met. Numerical measures of toxicity, product information: **The following values are calculated based on chapter 3.1 of the GHS document:** ATEmix (oral) 3,611.00 mg/kg; ATEmix (dermal) 9,266.00 mg/kg; ATEmix (inhalation-dust/mist) 27.90 mg/L.

### SECTION 12: Ecological Information

**Environmental**

**Ecotoxicity:** Very toxic to aquatic life with long lasting effects. This product is toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when cleaning of equipment or disposing of equipment wash waters or rinseate. **Note:** 59.47 % of the mixture consists of components(s) of unknown hazards to the aquatic environment. **Metolachlor, CAS# 51218-45-2, Partition Coefficient:** 2.9. **Algae Aquatic Plants:** Green algae 96-hr EC50 = 0.4 mg/L. **Fish:** Bluegill 96-hr EC50 = 10 mg/L. **Crustacea:** 25.1: 48 h Daphnia magna mg/L LC50, 4.25: 48 h Daphnia magna mg/L EC50, 13 - 18.4: 48 h Daphnia magna mg/L EC50 static. **Atrazine, CAS# 1912-24-9, Partition Coefficient:** 2.59. **Algae Aquatic Plants:** 0.03: 72 h Desmodesmus subspicatus mg/L EC50, 0.014 - 0.027: 96 h Desmodesmus subspicatus mg/L EC50 semi-static, 0.13: 96 h Pseudokirchneriella subcapitata mg/L EC50, 0.0929: 72 h Pseudokirchneriella subcapitata mg/L EC50 semi-static, 0.0096 - 0.07: 72 h Pseudokirchneriella subcapitata mg/L EC50 static, 0.072: 72 h Desmodesmus subspicatus mg/L EC50 static, 0.2: 72 h Pseudokirchneriella subcapitata mg/L EC50, 0.004: 96 h Pseudokirchneriella subcapitata mg/L EC50 static. **Fish:** 4.5 - 11: 96 h Oncorhynchus mykiss mg/L LC50, 3 - 6.75: 96 h Oncorhynchus mykiss mg/L LC50 semi-static, 5.4 - 8.4: 96 h Lepomis macrochirus mg/L LC50 static, 23.999: 96 h Lepomis macrochirus mg/L LC50 semi-static, 4.1: 96 h Pimephales promelas mg/L LC50 static, 4.3: 96 h Poecilia reticulata mg/L LC50 static, 3 - 6.75: 96 h Oncorhynchus mykiss mg/L LC50 static, 8: 96 h Lepomis macrochirus mg/L LC50 flow-through, 16: 96 h Lepomis macrochirus mg/L LC50, 19: 96 h Cyprinus carpio mg/L LC50 static, 15.7 - 20.2: 96 h Cyprinus carpio mg/L LC50 semi-static. **Crustacea:** 5.2 - 8.1: 48 h Daphnia magna mg/L EC50 Static. **Persistence and degradability:** Not readily biodegradable. **Bioaccumulation:**

Not likely to bioaccumulate. **Other adverse effects:** This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

### SECTION 13: Disposal Information

**Product disposal:**

Acute waste may be hazardous. 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. Keep out of drains, sewers, ditches and water ways. **Container disposal:** Refer to product label for container disposal. Emptied container retains product vapor and residue. Do not allow rinse waters to contaminate soil or waterways. Do not reuse containers.

### SECTION 14: Transport Information

**U.S. DOT:** Not subject

to DOT regulation for ground transportation. **TDG:** Not regulated. **IMDG:** UN 3082, Environmentally hazardous substance, liquid, n.o.s. (Mesotrione, Atrazine), 9, III; Marine Pollutant. EmS-No. F-A, S-F. Special Provisions: 274, 335. **IATA:** UN 3082, Environmentally hazardous substance, liquid, n.o.s. (Mesotrione, Atrazine), 9, III. ERG Code: 9L. Special Provisions: A97, A158, A197.

### 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:** Caution. **EPA Registration No.:** 74530-99. **Hazards to Humans and Domestic Animals:** Causes moderate eye irritation. Harmful if swallowed. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. **Read product label and ensure all necessary precautions. Refer all advisories. Complies with International Inventories:** TSCA, DSL/NDSL, EINECS/ELINCS, IECSC, KECL, PICCS, AICS. **SARA 311/312 Hazard Categories:** Acute health: Yes. Chronic Health: Yes. Other hazards: Not listed. **SARA 313: Atrazine** reportable a threshold value, 1.0%. **CERCLA:** None listed. **California Proposition 65:** None listed. **State Right-to-Know Regulations:** NJ for Metolachlor. NJ, MA, PA for Atrazine. **CWA (Clean Water Act):** This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

### SECTION 16: Other Information

NFPA Ratings:	Health = 2	Fire = 0	Instability = 0	
HMS Ratings:	Health = 2 (chronic)	Fire = 0	Instability = 0	Personal Protection

**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 - Cerintoxics; 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:** October 3<sup>rd</sup>, 2023. **Revision no. 1**  
**Reason for Revision:** SDS review and truncate. Confirm/Update Section 14. Review, truncate, and/or update Sections 2, 13-15 (PRN 2012-1), 16. Address change. **Disclaimer:** Use this information only as a supplement to other information; make independent determinations as to the suitability and completeness of this information. No guarantee expressed or implied is made by HELM Agro US, INC. or its affiliates as to the results to be obtained based upon use of the information provided herein, or to any liability arising out of the use of this information. **SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE,** except that the product shall conform to contracted specifications, and that the product does not infringe any valid United States or Canadian patent. No claim of any kind shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.