



SAFETY DATA SHEET

SDS ID: 74530-74

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	HELMET
Product use / type:	Herbicide
EPA Registration No.:	74530-74
Chemical name / active ingredient(s):	Metolachlor: 2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) acetamide
Manufacturer / Registrant:	Helm Agro US, Inc. 401 E. Jackson St., Suite 1400 Tampa, FL 33602
Manufacturer's Telephone:	813-621-8846
Email:	info@helmagro.com
Chemical Emergencies:	1-800-424-9300 (Chemtrec)

2. HAZARDS IDENTIFICATION

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

Classification

Acute Toxicity – Inhalation	Category 4
-----------------------------	------------

EMERGENCY OVERVIEW

Signal Word: **WARNING**

Pictogram:



Appearance: Dark amber to brown **Physical state:** Liquid

Odor: Mild, hydrocarbon-like

Hazard Statements:

- Harmful if inhaled

Precautionary Statements:

- Avoid breathing dusts / mists / fumes / vapors / spray.
- Use only outdoors or in a well-ventilated area.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Call a poison center / doctor if you feel unwell.

Other Information / Potential Hazards:

May cause eye irritation.

Toxic to aquatic life with long lasting effects.

SAFETY DATA SHEET

SDS ID: 74530-74

HELMET

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight % **
Metolachlor: 2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) acetamide	51218-45-2	84.4
Other ingredients	-	15.6

** Values are not product specifications.

4. FIRST AID MEASURES

If inhaled:	<ul style="list-style-type: none">• 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.
If on skin or clothing:	<ul style="list-style-type: none">• Remove contaminated clothing and shoes.• Rinse skin with plenty of water for 15 or 20 minutes. If irritation develops, call a poison control center or doctor for treatment advice.
If in Eyes:	<ul style="list-style-type: none">• Hold eye open and rinse 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:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Rinse mouth with water.• 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.
First Aid Note:	<ul style="list-style-type: none">• Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

5. FIRE-FIGHTING MEASURES

Flammable properties: Not flammable. May support combustion at elevated temperatures.

Extinguishing media: Water fog, dry chemical, 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.

Protective equipment and precautions Wear full protective firefighting gear including self-

SAFETY DATA SHEET

SDS ID: 74530-74

HELMET

for firefighters:

contained breathing apparatus pressure demand (MSHA/NIOSH approved or equivalent).

Hazardous decomposition products:

Under fire conditions: oxides of carbon, nitrogen and sulfur. May release irritating and toxic vapors due to thermal decomposition.

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.

Environmental precautions:

Prevent further spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. Do not flush into drains, surface water or sanitary sewer system.

Methods for containment:

Contain spill with inert material (e.g. sand, silica gel, binder).

Methods for cleanup:

Pick up absorbent mechanically by shovel and transfer to properly labeled containers for disposal.

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.

Precautions for safe storage:

Store and handle in accordance with good industrial hygiene practices. Keep container tightly closed. Store in a cool and well-ventilated place.

Incompatible storage situations:

Separate pesticides during storage to prevent cross-contamination of other pesticides, fertilizers, food, and feed.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Guidelines:

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 in 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:	Tightly fitting chemical safety goggles.

SAFETY DATA SHEET

SDS ID: 74530-74

HELMET

Body / skin protection:	Long sleeved shirt, long pants, shoes plus socks. Coveralls over short-sleeved shirt and short pants. Wash work clothing before reuse, separately from other laundry.
Hand protection:	Wear chemical-resistant gloves / hand protection.
Respiratory protection:	If handling without sufficient ventilation, wear mist filtering respirator with organic cartridge(s) or pesticide rated filters.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Appearance:	Dark amber to brown
Odor:	Mild, hydrocarbon-like
pH:	5.91 at 20° C (1% aqueous solution)
Melting point:	Not applicable
Boiling point:	>242° C
Flash point:	Not flammable
Relative density:	1.116 g/ml at 20° C
Water solubility:	Miscible in water
Viscosity:	172.8 centistokes at 20° C

10. STABILITY AND REACTIVITY

Reactivity / chemical stability:	Stable under normal temperature and conditions.
Conditions / Materials to avoid:	Extreme heat, sparks and fire.
Hazardous decomposition products:	No information available.
Hazardous reactions:	Not expected under normal conditions of handling and use.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Inhalation:	Harmful if inhaled.
Ingestion:	Maybe harmful if swallowed.
Eye contact:	May cause eye irritation.
Skin contact:	May cause skin irritation to susceptible persons.
Symptoms:	Contact with eyes will cause burning.

Information on component toxicological effects:

Metolachlor (51218-45-2)	
Acute oral LD50:	Rat LD ₅₀ : >2000 mg/kg
Acute dermal LD50:	Rat LD ₅₀ : >2000 mg/kg
Acute inhalation LC50:	Rat 4-hr LC ₅₀ : >3.2 mg/L

SAFETY DATA SHEET

SDS ID: 74530-74

HELMET

Eye irritation: Minimally irritating
Skin irritation: Non-irritating.
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.

Mutagenic effects: Not mutagenic

2.8% of the mixture consists of substances of unknown acute toxicity.

12. ECOLOGICAL INFORMATION

Environmental Hazards: Toxic to aquatic life with long lasting effects. Keep out of any body of water.

Ecotoxicity: 96-hour LC₅₀: 3.9 mg/l *Onchorhynchus mykiss*
Metolachlor (51218-45-2) 48-hour EC₅₀: 25.1 mg/l *Daphnia magna*
96-hour EC₅₀: 0.01 mg/l *Pseudokirchneriella subcapitata*

Persistence and degradability: No information available.

Bioaccumulation: Low potential for bioaccumulation.

13. DISPOSAL CONSIDERATIONS

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.

14. TRANSPORT INFORMATION

	Land transport (U.S. DOT)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN number		UN 3082	UN 3082
Proper Shipping Name	Not Regulated	Environmentally hazardous substance, liquid, n.o.s. (Metolachlor)	
Transport hazard class(es)		9	9
Packing group		III	III
Hazard label(s)		Marine Pollutant	Marine Pollutant
Environmental hazards		Yes	Yes
Special precautions for user		None Assigned	None Assigned

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

15. REGULATORY INFORMATION

U.S. Federal Regulations:

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.:

74530-74 Hazards to Humans and Domestic Animals

Harmful if swallowed, inhaled, or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. This product may cause skin sensitization reactions in some people. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

Environmental Hazards

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. DO NOT contaminate water when disposing of equipment wash waters or rinsate.

TSCA: Exempt, regulated under FIFRA.
SARA 311/312: Acute health
SARA 313: None listed
CERCLA: None listed

U.S. State Regulations:

State Right-to-Know Regulations

State:	MA	NJ	PA	RI
Metolachlor	-	X	-	-

California Proposition 65: This product does not contain substances known to the state of California to cause cancer and/or reproductive/developmental effects.

SAFETY DATA SHEET

SDS ID: 74530-74

HELMET

16. OTHER INFORMATION

NFPA Ratings:	Health	Fire	Instability
	2	1	0

Revision No.: 2.0
Revision Date: 26 January 2023
Revision Note: Updated Section 14 to match HELMET Herbicide

Key / Legend

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; CPR - 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; 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; 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

Other information / Disclaimer

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.

End of Safety Data Sheet