



SAFETY DATA SHEET

SDS ID: 74530-75

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	ARGOS™ ULTRA
Product use / type:	Herbicide
EPA Registration No.:	74530-75
Chemical name / active ingredient(s):	Metolachlor: 2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) acetamide and Mesotrione: 2-[4-(Methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexanedione
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
Eye Damage / Irritation	Category 2B
Sensitization – Skin	Category 1

EMERGENCY OVERVIEW

Signal Word: WARNING

Pictogram:



Appearance: Yellowish to light brown

Physical state: Liquid

Odor: Faint

Hazard Statements:

- Harmful if inhaled.
- Causes eye irritation
- May cause an allergic skin reaction

Precautionary Statements:

- Avoid breathing vapors / mists / spray.
- Wear protective gloves.
- Wash thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Contaminated clothing must not be allowed out of the workplace.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. Call a poison center / doctor if you feel unwell.
- IF ON SKIN: Wash with plenty of soap and water.
- If skin irritation or rash occurs: Get medical advice / attention.
- Wash contaminated clothing before reuse.
- Dispose of contents / container in accordance with federal / state regulations.

Other Information / Potential Hazards:

Contact with skin may cause irritation.

Very toxic to aquatic life with long lasting effects.

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	45.0
Mesotrione: 2-[4-(Methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexanedione	104206-82-8	4.0
Other ingredients	-	51.0

. Values are not product specifications.

4. FIRST AID MEASURES

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. Have person sip glass of water if able to swallow. • Do not induce vomiting unless told by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin or clothing:	<ul style="list-style-type: none"> • 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 inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration. Administer artificial respiration preferably with the aid of a

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	pocket mask equipped with a one-way valve. <ul style="list-style-type: none">• Call a poison control center or doctor for further treatment advice.
Note to physician:	<ul style="list-style-type: none">• Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable properties:	Not flammable.
Extinguishing media:	Water fog, dry chemical, foam or CO ₂
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 for firefighters:	Wear full protective firefighting gear including self-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 outdoors and 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 in original labeled container. Keep container tightly closed. Store in accordance with good industrial hygiene

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and pesticide handling practices. Store away from heat and open flame in a cool and well-ventilated place. Keep out of reach of children.

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:	Chemical safety goggles.
Body / skin protection:	Long sleeved shirt, long pants, shoes plus socks. Wash work clothing before reuse.
Hand protection:	Wear chemical resistant gloves / hand protection.
Respiratory protection:	If handling without sufficient ventilation or if irritation is experienced, wear a mist filtering respirator with organic cartridge(s) or pesticide rated filters.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Appearance:	Yellowish to light brown
Odor:	Faint chemical-like
pH:	3.28 at 20° C (1% w/v aqueous solution)
Melting point:	Not applicable
Boiling point	No information available
Flash point:	Not flammable
Relative density:	1.06 g/ml at 20° C
Water solubility:	Miscible
Viscosity:	904.4 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. Strong acids and oxidizers.

Hazardous decomposition products: None known under normal use and conditions.

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: No information available

Eye contact: Causes moderate eye irritation

Skin contact: May cause an allergic skin reaction to susceptible persons.

Symptoms: Contact with eyes may cause temporary burning.

Information on product toxicological effects:

Acute oral LD50: Rat LD₅₀: >5000 mg/kg

Acute dermal LD50: Rat LD₅₀: >5000 mg/kg

Acute inhalation LC50: Rat 4-hr LC₅₀: >2.11 mg/L

Eye irritation: Moderately irritating

Skin irritation: Non-irritating

Sensitization: Moderate contact 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: No information available

Mutagenic effects: Not mutagenic.

12. ECOLOGICAL INFORMATION

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

Ecotoxicity:

Metolachlor (51218-45-2): 96-hour LC₅₀: 3.9 mg/l *Onchorhynchus mykiss*
48-hour EC₅₀: 25.1 mg/l *Daphnia magna*
96-hour EC₅₀: 10 ug/l *Pseudokirchneriella subcapitata*

Mesotrione (104206-82-8): 96-hour LC₅₀: >100 mg/L *Onchorhynchus mykiss*
48-hour EC₅₀: 60.4 mg/L *Daphnia magna*
72-hour EC₅₀: 977 ug/l *Pseudokirchneriella subcapitata*

Persistence and degradability: No information available.

Bioaccumulation: Low potential for bioaccumulation.

Environmental fate:

13. DISPOSAL CONSIDERATIONS

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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. Do not dispose of waste material into the environment.

Container disposal: Emptied container retains product residue. Clean container promptly after emptying. Observe all labeled safeguards until container is destroyed or recycled. Do not reuse container.

14. TRANSPORT INFORMATION

U.S. DOT: Not subject to DOT regulation in packages less than 119 gallons (450 liters).
UN3082, Environmentally hazardous substance, liquid, n.o.s.(Metolachlor, mesotrione), 9, III

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.: 74530-75

Hazards to Humans and Domestic Animals

Prolonged or frequent repeated skin contact may cause allergic reactions in some individuals. Causes moderate eye irritation. Avoid contact with clothing or eyes. Wear protective eyewear. Remove contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling and before chewing gum, drinking, eating, using tobacco, or using the toilet.

Environmental Hazards

DO NOT apply this product directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark for terrestrial uses. DO NOT contaminate water when cleaning equipment or disposing of equipment wash water 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 contains substances known to the state of California to cause cancer and/or reproductive/developmental effects.

16. OTHER INFORMATION

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NFPA Ratings:	Health	Fire	Instability
	1	1	0

Revision No.: 1.0
Revision Date: 12-April-2017
Revision Note: Initial release

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

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End of Safety Data Sheet