



SAFETY DATA SHEET (SDS) ID: EPA Reg. No. 74530-85, FEARLESS XTRA Herbicide

SECTION 1: Product and Company IDs

Product name: FEARLESS XTRA Herbicide
Product use / type: Herbicide
Restrictions on use: See product label.
SDS ID: EPA Reg. No.: 74530-85
Chemical name / active ingredients: Acetochlor & Atrazine. See Section 3.
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: Warning. **Pictograms:**



Serious Eye Irritation:	Category 2B
Acute Oral Toxicity:	Category 4
Acute Inhalation	Category 4/5
Skin Sensitization	Category 1
Specific Target Organ Toxicity – Single Exposure	Category 3
Specific Target Organ Toxicity – Repeated Exp.	Category 2
Carcinogenicity	Category 2

Hazard Statements:

- Harmful if swallowed.
- May cause an allergic skin reaction.
- May cause respiratory irritation.
- Suspected of causing cancer.
- Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements:

- Refer Section 4, First Aid Measures.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Wash thoroughly after handling.
- Avoid breathing mist/vapors/spray.
- Do not eat drink or smoke when using this product.
- Wear protective gloves/eye protection.
- Use only outdoors or in a well-ventilated area.
- Wear respiratory protection.
- If experiencing respiratory symptoms: Immediately call a poison center.
- If exposed or concerned, get medical attention. Call POISON CENTER or doctor/physician if you feel unwell.
- Refer Sections 7 and 13.

Other Information / Potential Hazards:

- Toxic to aquatic life.

SECTION 3: Ingredient Composition

Chemical Name	CAS #	% Composition (exact values may be withheld as trade secrecy)
2-Chloro-N-(ethoxymethyl)-N-(2-ethyl-6-methylphenyl) acetamide (Acetochlor)	34256-82-1	46.3
6-Chloro-N-ethyl-N'-(1-methylethyl)-1,3,5-triazine-2,4-diamine (Atrazine)	1912-24-9	18.3
Furilazole (safener)	121776-33-8	<=2.0**
Other:	N/R as trade** secrecy	<=34.0**

** Values are not product specifications.

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. Sensitized persons should avoid reuse. **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. **Physician:** Protect self from material. May cause moderate temporary eye irritation. May cause an allergic skin reaction. May be harmful if inhaled or if swallowed. Treatment is controlled removal of exposure followed by symptomatic and supportive care.

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:** Evacuate area. Use extinguishing media appropriate for surrounding fire. Prevent contaminated firefighting waters and spillage from entering sewers, drains and waterways. Contain run-off water with temporary dike. Prevent use of contaminated buildings, area and equipment until decontamination. **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:** Under fire conditions, may emit irritating vapors, nitrogen oxide, carbon monoxide and hydrogen chloride.

SECTION 6: Accidental Release Measures

Personal precaution: Isolate and post, and clean spill area. Keep unnecessary personnel, pets and livestock from 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. Under certain conditions this chemical can leach through soil and contaminate soil and ground water. If possible, remove contaminated soil. **Methods for containment:** Contain spill with inert material (e.g. sand, silica gel, binder). Clean immediately. **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 contact with eyes, skin and clothing. Avoid breathing vapors or mist. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Avoid contamination of work clothing; remove and clean after handling. **Precautions for safe storage:** Store and handle in accordance with good industrial hygiene practices. Keep container tightly closed. Store in original container in a cool, dry and well-ventilated place away from children and animals. Keep away from incompatible materials. Minimum shelf life = 2 yrs. **Incompatible storage situations:** Separate pesticides during storage to prevent cross-contamination of other pesticides, fertilizers, food, water, feed. Do not store in unlined mild steel or polyvinyl chloride (PVC) containers. Separate pesticides during storage to prevent cross-contamination of other pesticides, fertilizers, food, 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.

Acetochlor: None specified. **Atrazine:** TLV (ACGIH): 2 mg/m³ (TWA): A3: Animal carcinogen. PEL (OSHA): No specific occupational exposure limit established. **Furilazole (Safener):** New Chemical Exposure Limit (NECL) 0.1 mg/m³ TWA. **Engineering controls:** Emergency eye wash/drench. Shower or suitable water supply near the work area. Ensure adequate ventilation, or provide local exhaust. **Personal protective equipment eye/face protection:** Safety glasses with side-shields. If potential for eye contact to occur, wear chemical tight goggles. **Body/skin protection:** Long sleeved shirt, long pants, shoes plus socks. Applicators must wear chemical resistant clothing and footwear plus socks. Wash work clothing before reuse. Launder separately from other laundry. **Hand protection:** Wear chemical resistant gloves / hand protection. **Respiratory protection:** If handling without sufficient ventilation or excess airborne exposure, wear a dust/mist filtering respirator with organic cartridge(s) or pesticide rated filters. Consult personal protective equipment manufacturers recommendations for cleaning and maintenance.

SECTION 9: Physical & Chemical Properties

Physical state: Liquid suspension. **Appearance:** Pink. **Odor:** Mild. **pH:** 7.0 – 8.5 at 50 g/L. **Melting point:** Not applicable. **Boiling point:** No information available. **Flash point:** Does not flash. **Explosive properties:** Not explosive. **Autoignition temperature:** No information available. **Oxidizing properties:** No information available. **Relative density:** 1.019 – 1.112 g/cm³ @ 20° C. **Water solubility:** Emulsifies. **Vapor pressure:** Not significant volatility. **Dynamic viscosity:** 300 cP at 10° C. **Partition coefficient:** log Pow: 4.14 at 20° C (acetochlor). **Partition coefficient:** log Pow: 2.5 at 25° C (atrazine).

SECTION 10: Stability & Reactivity

Reactivity / chemical stability: Stable under normal temperature and conditions. **Conditions / Materials to avoid:** Extreme heat, sparks and creation of dust. Corrosive to mild steel and aluminum. Contact with mild steel may result in color change and reduce product's ability to emulsify with water. Incompatible with polyvinyl chloride (PVC). **Hazardous decomposition products:** Oxides of carbon, nitrogen, and hydrogen chloride. **Hazardous reactions:** Not expected under normal use. Corrosive to mild steel and aluminum.

SECTION 11: Toxicological Information

See Section 4 for information on likely routes of exposure and effects. **Product toxicology (similar formulation):** **Acute oral LD₅₀:** Rat = 1249 mg/kg. **Acute dermal LD₅₀:** Rat > 5000 mg/kg. **Acute inhalation LC₅₀:** No 4 hr LC₅₀ at maximum achievable concentration. **Eye irritation:** Slightly irritating to the eye. **Skin irritation:** Essentially non-irritating. Primary irritation index: 0.4/8.0. **Sensitization:** Positive incidence 10%. **Toxicology note:** Above data obtained from similar formulation. **Delayed and immediate effects as well as chronic effects from short and long-term exposure.** **Component information:** **Acetochlor** (34256-82-1): Sensitization (experience with human exposure): May cause sensitization in susceptible individuals. **Mutagenic effects:** Not considered genotoxic. **Carcinogenicity:** Nasal and thyroid tumors in rats. Liver tumors in rats and mice. All not relevant to humans. **Reproductive / Developmental effects:** Reproductive and developmental effects in rats only in the presence of significant maternal toxicity. No developmental effects in rabbits. **Atrazine (1912-24-9)** **Mutagenic effects:** Not considered genotoxic. **Carcinogenicity:** Mammary tumors in rats. Mode of action not relevant to humans. **Reproductive / Developmental effects:** Reproductive and developmental effects in rats and rabbits only in the presence of significant maternal toxicity. No developmental effects in rats. **Furilazole (121776-33-8)** **Mutagenic effects:** Not considered genotoxic. **Carcinogenicity:** Liver, testes and forestomach tumors in rats. Liver and lung tumors in mice. Questionable relevance to humans. **Reproductive / Developmental effects:** No reproductive effects in rats. No developmental effects in rabbits. Developmental effects in rats only in the presence of maternal toxicity.

SECTION 12: Ecological Information

Environmental Hazards: Toxic to aquatic life. Keep out of any body of water. **Ecotoxicity:** (Similar product) 96-hour LC₅₀: 0.36 – 1.2 mg/L *Onchorhynchus mykiss*, 72-hour, static, EbC₅₀: 5.01 ug/L *Selenastrum Capricornutum*. **Ecotoxicity:** **Acetochlor** (34256-82-1) 96-hour LC₅₀: 0.36 – 1.2 mg/L *Onchorhynchus mykiss*, 96-hour LC₅₀: 1.3 mg/L *Lepomis macrochirus*, 48-hour EC₅₀: 6.9 mg/L *Daphnia magna*, 96-hour EC₅₀: 0.27 – 1.49 ug/L *Selenastrum capricornutum*. **Persistence and degradability:** Acetochlor soil half-life 3.4 – 29 days. **Bioaccumulation:** Whole fish bioaccumulation factor: 20. Rapid depuration after end of exposure. **Mobility:** Koc: 74 – 422. **Ecotoxicity:** **Atrazine** (1912-24-9) 48-hour EC₅₀: 8.6 - 16 mg/L *Daphnia magna*. **Bioaccumulation:** Whole fish bioaccumulation factor: 15. Rapid depuration after end of exposure. **Ecotoxicity:** **Furilazole** (121776-33-8) 96-hour LC₅₀: 6.2 mg/L *Onchorhynchus mykiss*, 96-

hour LC₅₀: 4.6 mg/L *Lepomis macrochirus*, 48-hour EC₅₀: 26 mg/L *Daphnia magna*, 96-hour EC₅₀: 34.8 mg/L *Selenastrum capricornutum*. **Persistence and degradability:** Furilazole aerobic soil half-life 52 – 78 days. Biodegradation: 1% within 28 days; Not readily biodegradable. Mobility: Koc: 56 – 341 l/kg.

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. Keep out of drains, sewers, ditches and water ways. Unusable material may be destroyed in a special controlled high temperature incinerator. **Container disposal:** Refer to product label for container disposal. Emptied container retains product vapor and residue. Observe all labeled safeguards until container is reconditioned or destroyed. Clean container by triple rinsing promptly after emptying. Do not allow rinse waters to contaminate soil or waterways. Do not reuse containers.

SECTION 14: Transport Information

U.S. DOT: Not regulated for domestic ground transportation. **IMDG, IATA:** UN3082, Environmentally hazardous substance, liquid, n.o.s. (Acetochlor, Atrazine), 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:** Caution. **EPA Registration No.:** 74530-85. **Hazards to Humans and Domestic Animals:** Harmful if swallowed or inhaled. Causes moderate eye irritation. May cause allergic skin reaction. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. **ENVIRONMENTAL HAZARDS:** Atrazine can travel (seep or leach) through soil and can enter groundwater which may be used as drinking water. **For more information, read EPA registered product label and advisories, EPA Registration No.:** 74530-85.

SARA 311/312 Hazard Categories: Refer Section 2, GHS hazards. **SARA 313:** Atrazine (CASRN 1912-24-9). **CERCLA:** N/A. **TSCA:** Components listed or exempt. **Clean Water Act:** N/A. **California Proposition 65:** California Proposition 65 WARNING: This product can expose you to chemicals including atrazine, which is known to the State of California to cause birth defects or other reproductive harm. This product can expose you to chemicals including acetochlor, which is known to the State of California to cause cancer. **For more information, go to** www.P65Warnings.ca.gov

State Right-to-Know Regulations:

Component / CASRN	MA	NJ	PA	NY
Atrazine 1912-24-9	X	X	X	-

SECTION 16: Other Information

NFPA Ratings:	Health = 2	Fire = 1	Instability = 0
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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; 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; FIFRA - Federal Insecticide, Fungicide and Rodenticide Act; GHS - Global Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAD - 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; NJTSS - 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: November 29th, 2023. **Revision no. 3 Reason for Revision:** SDS review and truncate. Confirm/Update Section 14. Review, truncate, and/or update Sections 2, 15 (PRN 2012-1), 16. Address change.

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