



SAFETY DATA SHEET

SDS ID: 74530-86

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	EXTREME[®] PACKAGED BY HELM
Product use / type:	Herbicide
Uses advised against / restrictions:	See label.
EPA Registration No.:	74530-86
Chemical name / synonym / active ingredient(s):	imazethapyr and isopropylamine salt of glyphosate
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

Eye Damage / Irritation	Category 2B
Aquatic acute	Category 3
Aquatic chronic	Category 3

EMERGENCY OVERVIEW

Signal Word: WARNING

Appearance: Pale straw yellow

Physical state: Liquid

Odor: Amine-like

Hazard Statements:

- Causes eye irritation
- Harmful to aquatic life
- Harmful to aquatic life with long lasting effects

Precautionary Statements:

- Wash with plenty of water and soap thoroughly after handling.
- 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: Call a POISON CENTER or doctor / physician.
- Dispose of contents/container in accordance with local/state/federal regulations.

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Other Information / Potential Hazards:

None known.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight % **
glyphosate-isopropylammonium	38641-94-0	22.0
imazethapyr	81335-77-5	1.8
Propylene glycol	57-55-6	1.0 - 5.0
Isopropylamine	75-31-0	1.0 - 5.0
Other ingredients	-	65.0 - 75.0

** Exact concentration of components withheld as a trade secret. Values are not product specifications.

4. FIRST AID MEASURES

If swallowed:	<ul style="list-style-type: none">• Immediately rinse mouth and then drink half a cup of water, seek medical treatment.• 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 inhaled:	<ul style="list-style-type: none">• Move person to fresh air. Keep patient calm.• Call a poison control center or doctor for further 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 with eye lids open.• Consult eye specialist for treatment advice.
If on skin or clothing:	<ul style="list-style-type: none">• Remove contaminated clothing and shoes.• Wash skin immediately with plenty of soap and water.
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.
Symptoms, both acute and delayed:	<ul style="list-style-type: none">• May cause moderate temporary eye irritation. Further symptoms and effects are not known.
Note to Physician:	Treat according to symptoms and with supportive care. Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE-FIGHTING MEASURES

Flammable properties:	Not flammable.
Suitable extinguishing media:	Water spray, dry chemical, foam, carbon dioxide (CO ₂)
Unsuitable extinguishing media:	High pressure water streams.

Specific material hazards	Under fire conditions, will emit toxic vapors, nitrogen oxides, carbon monoxide, carbon dioxide and hydrocarbons and phosphorus compounds.
Firefighting measures:	Use extinguishing media appropriate for surrounding fire. Use minimal water to prevent environmental contamination. 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). Decontaminate equipment after use.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Isolate, clear 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, lakes, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. If spill is on soil near desirable trees or plants remove contaminated soil after initial clean-up.
Methods for containment:	Dike to contain spill with inert material (e.g. absorbent, silica gel, or binder) for transfer to disposal containers.
Methods for cleanup:	Pick up absorbent and transfer to properly labeled containers for disposal. If possible, spilled material should be recovered and applied according to label instructions. Thoroughly clean tools and contaminated surfaces with detergent and water. Place rinse waters into containers for approved disposal. Place any leaking containers in oversize drums for transport and disposal.

7. HANDLING AND STORAGE

Precautions for safe handling:	Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated skin contact. Avoid breathing vapor or mists. Wash outside of gloves before removing. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Thoroughly clean equipment after use. Remove contaminated clothing. Keep away from sources of ignition: heat, sparks open flame. Do not mix, store or apply the product or spray solution of the product in galvanized or unlined steel (except stainless steel)
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containers or spray tanks. Product may react and evolve highly combustible hydrogen gas.

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. Store only in original labeled container. Keep out of reach of children. Minimum shelf-life: 2 years.

Incompatible storage situations:

Do not store product or spray solution in unlined mild steel or galvanized steel containers. Separate pesticides during storage to prevent cross-contamination of other pesticides, fertilizers, food, and animal feed. Keep in original container in a cool dry, well-ventilated place away from sources of ignition. Protect from freezing conditions below 32° F (0° C) and elevated temperatures above 104° F (40° C) as changes to product properties may occur.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Guidelines:

The following recommendations for exposure controls are intended for the manufacture, formulation and packaging of this material. Commercial applicators and/or on-farm applications should refer to the product label for personal protection equipment requirements.

Control Parameters:	
Isopropylamine	ACGIH TLV: STEL value 10 ppm; TWA value 5 ppm OSHA PEL: 5 ppm 12 mg/m ³ ; TWA value 5 ppm 12 mg/m ³ ; STEL value 10 ppm 24 mg/m ³
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 can occur, wear chemical tight goggles. Wear face shield if splashing hazard occurs.
Body / skin protection:	Choice of body and skin PPE should be based on activity and potential exposure. 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. Choice of gloves should be based on user's activities and potential for exposure.
Respiratory protection:	If handling without sufficient ventilation or excess airborne exposure occurs, wear a mist filtering respirator

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	with organic cartridge(s) or pesticide rated filters. Consult personal protective equipment manufacturers recommendations for cleaning and maintenance.
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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Appearance:	Pale straw yellow
Odor:	Faint odor, amine-like
pH:	Approx. 6.0 – 8.0 at 20° C
Crystallization point:	Approx. 0° C
Boiling point	Approx. 100° C
Flash point:	Non-flammable
Explosive properties:	Not explosive when used as intended
Autoignition temperature	No information available
Oxidizing properties:	Not fire-propagating
Relative density:	9.0965 lb/gallon (1.08 g/ml) at 20° C
Water solubility:	Emulsifiable
Vapor pressure:	Approx. 23.3 hPa at 20° C
Dynamic viscosity:	7.14 mPa.s at 25° C
Partition coefficient:	No information available

10. STABILITY AND REACTIVITY

Reactivity / chemical stability:	Stable under normal conditions of use, handling and storage. No hazardous reactions expected.
Incompatible materials:	Do not mix, store or apply this product in galvanized or unlined steel containers.
Hazardous decomposition products:	Thermal decomposition products: carbon monoxide, carbon dioxide, nitrogen oxides, phosphorous oxides and hydro carbons. If heated above decomposition temperature toxic vapors may be released.
Hazardous reactions:	No hazardous reactions expected under normal conditions of handling and use.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Inhalation	Relatively non-toxic after short-term inhalation.
Eye contact	Causes substantial but temporary eye irritation.
Skin contact	May cause slight irritation to the skin.
Ingestion	Relatively non-toxic after single ingestion.

Product toxicology:

Acute oral LD₅₀:	Rat (male/female) >2000 mg/kg No mortality observed.
Acute dermal LD₅₀:	Rat (male/female) >4000 mg/kg No mortality observed.
Acute inhalation LC₅₀:	Rat (male/female) >5.359 mg/kg 4 hr; Aerosol with respirable particles was tested.

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Eye irritation: Causes substantial but temporary eye irritation.†
Skin irritation: May cause slight irritation to the skin.†
Sensitization: Skin sensitizing effects were not observed in animal studies.†

† Statements based on properties of individual components. Test data on product not available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Component information:

Isopropylamine (75-31-0)

Mutagenic effects: No genotoxic potential.

Imazethapyr (81335-77-5)

Mutagenic effects: No mutagenic effect in tests with microorganisms and mammals

Carcinogenicity: In long-term studies with rats and mice no carcinogenic effect was observed.

Reproductive / Developmental effects: Results from animal studies gave no indication of a fertility impairing effect. No indications of a developmental toxic / teratogenic effect were observed in animal studies.

Glyphosate-isopropylammonium
(38641-94-0)

Mutagenic effects: No mutagenic effect in tests with microorganisms and mammals

Carcinogenicity: In long-term studies with rats and mice no carcinogenic effect was observed.

Reproductive / Developmental effects: Results from animal studies gave no indication of a fertility impairing effect. Causes developmental effects in animals at high, maternally toxic doses.

Toxicology Note: Improper use and handling can be harmful to health.

12. ECOLOGICAL INFORMATION

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

Information on: Imazethapyr (81335-77-5)

Ecotoxicity: 96-hour LC₅₀: 340 mg/L *Onchorhynchus mykiss*
48-hour EC₅₀: >1000 mg/L *Daphnia magna*
96-hour EC₅₀: 71 mg/L *Selenastrum capricornutum*
14-Day EC₅₀: 0.01 mg/l (growth rate), *Lemna gibba*

Persistence and degradability: Not readily biodegradable

Bioaccumulation potential: No information available

Mobility in soil: Depending on the extent of degradation, imazethapyr can be transported to deeper soil where soils are permeable and under high moisture conditions.

Information on: Glyphosate-isopropylammonium (38641-94-0)

Ecotoxicity: LC₅₀: >86 mg/L *Onchorhynchus mykiss*
 LC₅₀: >24 mg/L *Lepomis macrochirus (static)*
 EC₅₀: 780 mg/L *Daphnia magna*
 EC₅₀: 12.5 mg/L *Chlorella pyrenoidosa*

Persistence and degradability: Not readily biodegradable

Bioaccumulation potential: Not expected to bioaccumulate based on n-octanol /water coefficient

Mobility in soil: Not expected to be significantly mobile in soil.

13. DISPOSAL CONSIDERATIONS

Product disposal: For pesticide wastes resulting from the use of this product that cannot be used according to label instructions, contact the state pesticide or environmental control agency or hazardous waste representative for disposal guidance. Waste must be disposed in accordance with applicable Federal, State or local regulations at an approved waste disposal facility. Contact Keep out of drains, sewers, ditches and water ways. Not a regulated RCRA waste.

Container disposal: Refer to product label for container disposal. Observe all labeled safeguards until container is reconditioned or destroyed. Clean container promptly after emptying, triple rinse. Do not allow rinse waters to contaminate soil or waterways. Crush or puncture container to prevent reuse.

14. TRANSPORT INFORMATION

U.S. DOT: Not regulated for domestic ground transportation in containers less than 119 gallons.

UN3082, Environmentally hazardous substance, liquid, n.o.s. (imazethapyr), 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: WARNING

EPA Registration No.: 74530-86

Hazards to Humans and Domestic Animals

Causes substantial but temporary eye injury. DO NOT get in eyes or on clothing. Harmful if absorbed through skin. Avoid contact with skin.

TSCA: TSCA exempt; regulated under FIFRA.

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SARA 311/312: Immediate, delayed, health hazards.
SARA 313: No substances listed.
CERCLA: Isopropylamine: RQ 100 lbs

U.S. State Regulations:

State Right-to-Know Regulations:

Component / CASRN	MA	NJ	PA
Isopropylamine (75-31-0)	X	X	X
Propylene glycol (57-55-6)		X	X

California Proposition 65: Warning! This product contains substances known to the State of California to cause cancer and birth defects or other reproductive harm.

16. OTHER INFORMATION

<u>NFPA Ratings:</u>	Health	Fire	Instability
	1	0	0

Revision No.: 1.0
Revision Date: 25-July-2018
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