



SAFETY DATA SHEET

EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)

1. IDENTIFICATION

PRODUCT NAME: Empero™
DESCRIPTION A water dispersible granular herbicide
EPA REGISTRATION NUMBER: 91234-31
COMPANY IDENTIFICATION: Atticus, LLC
5000 CentreGreen Way, Suite 100
Cary, NC 27513

2. HAZARDS IDENTIFICATION



WARNING
Harmful if swallowed
Causes eye irritation



Very toxic to aquatic life with long lasting effects

3. COMPOSITION / INFORMATION ON INGREDIENTS

Common Name	Chemical Name	CAS #	Composition
Halosulfuron-methyl	3-chloro-5-[[[[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonyl]amino]sulfonyl]-1-methyl-1H-pyrazole-4-carboxylic acid	100784-20-1	75.0%

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical assistance, call SafetyCall: 1-844-685-9173. For chemical emergency: spill, leak, fire, exposure or accident, call CHEMTREC: 1-800-424-9300.

IF SWALLOWED: Immediately call a doctor or poison control center for treatment advice. Remove visible particles from mouth. 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 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 advice/attention.

5. FIRE-FIGHTING MEASURES

Flash Point: Not available.

Fire and Explosion Hazards: Thermal decomposition may produce hazardous gasses and/or materials.

Extinguishing Medium: Carbon dioxide, dry chemical, foam, water fog.

Fire Fighting Equipment: Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear.

Fire Fighting Instructions: Evacuate area of all unnecessary personnel and fight fire from a safe distance upwind. Contain contaminated water / firefighting water; do not allow to enter drains or waterways. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

NFPA Ratings: Health – 1 / Flammability – 0 / Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear protective equipment as described in Section 8 of this document. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

Spill Cleanup: Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

Storage: Do not contaminate water, food or feed by storage or disposal. Store in a dry and secure location.



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8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Controls: Ensure adequate ventilation, especially in confined areas. Facilities storing or utilizing this product should be equipped with an eye wash station and safety shower.

Protective Clothing: Wear long sleeved shirt and long pants, and shoes plus socks.

General: Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	White granule
ODOR:	Nearly odorless
FLASHPOINT:	Not available
PH:	9-10 (1% aq.)
DENSITY:	0.55-0.6 g/cm ³
SOLUBILITY:	Soluble in water

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Heat, flames, sparks, moisture

CHEMICAL STABILITY: Stable under normal use and storage conditions.

INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizing agents, acids

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion may release oxides of carbon, nitrogen, and sulfur as well as hydrogen chloride gas

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ORAL TOXICITY (RAT LD₅₀):	1,287 mg/kg		
DERMAL TOXICITY (LD₅₀):	> 5,000 mg/kg		
INHALATION TOXICITY (LC₅₀):	> 5.2 mg/L		
EYE IRRITATION:	Moderately irritating		
SKIN IRRITATION:	Slightly irritating		
SKIN SENSITIZATION:	Information not available		
CARCINOGENICITY:			
EPA:	Not Listed	NTP:	Not Listed
ACGIH:	Not Listed	OSHA:	Not Listed
IARC:	Not Listed		

MUTAGENIC TOXICITY: No evidence of mutagenic effects during *in vivo* and *in vitro* assays.

REPRODUCTIVE TOXICITY: No evidence of reproductive toxicity has been demonstrated.

12. ECOLOGICAL INFORMATION

This pesticide is toxic to non-target vascular plants. This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Halosulfuron-methyl is known to leach through soil into ground water under certain conditions as a result of label use.

The following information is for the active ingredient, Halosulfuron:

AQUATIC TOXICITY

Rainbow Trout (96-hour LC₅₀): > 118 mg/L
Bluegill (96-hour LC₅₀): > 131 mg/L
Daphnia (48-hour EC₅₀): > 107 mg/L
Algae (5d EC₅₀): (green) 0.0053 mg/L
(blue-green) 0.158 mg/L

AVIAN TOXICITY

Bobwhite Quail (oral LD₅₀): > 2250 mg/kg
Mallard Duck/Quail (Dietary LC₅₀): > 5620 ppm

OTHER TOXICITY

Bees: LD₅₀ (dermal): > 100 µg/bee

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to the label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for Guidance.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Refer to the product label for specific container disposal instructions.

14. TRANSPORT INFORMATION

US DOT (shipped by land):

Containers ≤ 882 pounds (400 kg): Not regulated by DOT.

Containers > 882 pounds (400 kg):

DOT Shipping Name:	UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (contains Halosulfuron-methyl), 9, PG III
Emergency Response Guide:	171
Marine Pollutant:	Yes

IMDG (shipped by vessel):

UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (contains Halosulfuron-methyl), 9, PG III, Marine Pollutant

IATA (shipped by air):

UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (contains Halosulfuron-methyl), 9, PG III



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15. REGULATORY INFORMATION

FIFRA –

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. The following is the hazard information as required on the pesticide label:

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Causes moderate eye irritation. Harmful if swallowed. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

Refer to the product label for additional precautionary statements.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to non-target vascular plants. 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 equipment or disposing of equipment washwaters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Halosulfuron-methyl is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

PHYSICAL OR CHEMICAL HAZARDS

Do not mix with or allow to come into contact with oxidizing agents. A hazardous chemical reaction may occur.

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.

SARA Title III – Section 302 Extremely Hazardous Substances

Not listed

SARA Title III – Section 311/312 Hazard Categories

Immediate

SARA Title III – Section 312 Threshold Planning Quantity

The threshold planning quantity (TPQ) for this product treated as a mixture is 10,000 lbs. This product contains no ingredients with a TPQ of less than 10,000 lbs.

SARA Title III – Section 313 Reportable Ingredients

Not listed

CERCLA Reportable Quantity (RQ) –

None

CALIFORNIA PROP 65 STATUS –

This product does not contain any chemicals known to the state of California to cause cancer or reproductive harm.

CANADA –

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

16. OTHER INFORMATION

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

To the extent consistent with applicable law, neither Atticus, LLC nor Seller be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

SDS Version: 1.0

Effective Date: 07/27/2017



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