SAFETY DATA SHEET

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

1. IDENTIFICATION

PRODUCT NAME: Derecho

DESCRIPTION: A liquid herbicide.

EPA REG. NO.: 91234-108

COMPANY Atticus, LLC

IDENTIFICATION: 940 NW Cary Parkway, Suite 200

Cary, NC 27513

2. HAZARD IDENTIFICATION



DANGER

Causes serious eye damage (H318)



Suspected of causing cancer (H351)



Harmful if swallowed, in contact with skin, or inhaled (H302+H312+H332) Causes mild skin irritation (H316) Combustible liquid (H227)

GHS Toxicity Classifications

| Acute toxicity, oral Acute toxicity, dermal | | Skin corrosion/irritation Carcinogenicity | Cat. 3 Cat. 2 |
|---|------------------|---|------------------|
| Acute toxicity, inhalation Serious eye damage/ | Cat. 4 Cat. 1 | Flammable liquids | Cat. 4 |

Prevention

eye irritation

Obtain special instructions before use. (P201)

Do not handle until all safety precautions have been read and understood. (P202)

Wash hands and skin thoroughly after handling. (P264)

Do not eat, drink or smoke when using this product. (P270)

Wear protective long-sleeved shirt and long pants, shoes plus socks, chemical-resistant gloves, and goggles or face shield. (P280)

Avoid breathing vapor or spray mist. (P261)

Use only outdoors or in a well-ventilated area. (P271)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338) Immediately call a POISON CENTER or doctor for treatment advice. (P310) IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. (P301+P312)

Rinse mouth. (P330)

IF ON SKIN: Wash with plenty of water. (P302+P352)

If skin irritation occurs: Get medical advice/attention. (P332+P313)

Call a POISON CENTER or doctor if you feel unwell. (P312)

Specific treatment (see Note to Physician on product label). (P321)

Take off contaminated clothing and wash it before reuse. (P362+P364)

IF INHALED: Remove person to fresh air and keep comfortable for breathing. (P304+P340)

IF exposure or concerned: Get medical advice/attention. (P308+P313)

Storage

Store locked up. (P405)

Disposal

Dispose of contents/container to an approved waste disposal plant. (P501)

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Common Name | Chemical Name | CAS# | Composition |
|----------------|------------------------------|------------|-------------|
| Sodium Salt of | [Sodium 5-[2-chloro-4- | 62476-59-9 | 20.1% |
| Acifluorfen | (trifluoromethyl)phenoxy]-2- | | |
| | nitrobenzoate] | | |

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact CHEMTREC at 1-800-424-9300 for emergency medical information.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison control center or doctor for treatment advice.

IF SWALLOWED: Immediately call a poison control center or doctor. 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 INHALED: Remove person to fresh air and keep comfortable for breathing. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing and wash before reuse. Rinse skin immediately with plenty of water. If skin irritation or rash occurs: call a poison control center or doctor for treatment advice.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. No specific antidote is available. Treat symptomatically.

5. FIREFIGHTING MEASURES

Flash Point (PMCC): 162°F (72°C)

Flammable Limits (LFL-UFL): Not Determined

Fire and Explosion Hazards: Thermal decomposition will release irri-

tating gases and fumes (see Section 10).

Extinguishing Medium: Foam, CO2, dry chemical or water mist.

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 - 3 / Flammability - 2 / Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately observing the precautions in Section 8 of this SDS. Isolate the hazard area and keep unnecessary and unprotected personnel from entering. In case of spill on floor or paved surfaces, mop up and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to label. Prevent material from contaminating soil or from entering sewage and drainage systems and bodies of water. Dike and contain the spill with inert material such as sand, earth, etc. Transfer liquid to containers and solid diking material to separate containers for recovery and disposal.

7. HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN AND ANIMALS. Do not get in eyes, on skin or clothing. Wear goggles or face shield when handling. Do not breathe vapor. In case of contact, immediately remove contaminated clothing and shoes. Wash contaminated clothing with soap and hot water before re-use.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Do not store below 32°F. Store in original container only. Keep container closed when not in use. Do not store near food or feed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

Protective Clothing: Wear goggles or face shield, chemical resistant gloves, long-sleeved shirt and long pants, shoes plus socks.

General: Some materials that are chemical resistant to this product are made of any waterproof material. If you want more options, follow the instructions for category A on an EPA chemical resistance category selection chart.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Yellow Liquid

Odor: Mild Flash Point: 162°F pH: 7.5 – 8.0

Density: 1.20 g/mL (10 lbs/gal) @ 26°C

Viscosity: 29.5 centipoise @ 26°C, 22.7 centipoise @ 38°C

Solubility: Soluble in water

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Do not allow to freeze.

CHEMICAL STABILITY: Stable under all normal use and storage conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: None when stored and handled as prescribed. Thermal decomposition may release oxides of carbon and nitrogen as well as hydrogen chloride and fluoride.

INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizers.

POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

The following is for the active ingredient, Sodium Acifluorfen:

ORAL TOXICITY (rat LD₅₀): 2,020 mg/kg
DERMAL TOXICITY (rat LD₅₀): > 2,000 mg/kg

INHALATION TOXICITY (rat LC₅₀): 2.04 mg/L (4-hour) **EYE IRRITATION:** Corrosive, causes irreversible eye damage.

SKIN IRRITATION: Moderately irritating, may be absorbed through the skin.

SKIN SENSITIZATION: Not a contact sensitizer.

CARCINOGENICITY: The active ingredient of this product (sodium acifluorfen) has been identified by the US EPA as a probable human carcinogen. Glycol Ether EB [CAS No. 111-76-2] is classified Group 3 by IARC.

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

REPRODUCTIVE TOXICITY: No evidence in animal studies.

12. ECOLOGICAL INFORMATION

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. Sodium acifluorfen is slightly toxic to fish and aquatic invertebrates and slightly toxic to aquatic plants. It is moderately to practically nontoxic to birds on an acute oral basis. Sodium acifluorfen is associated with reproductive effects in bobwhite quail but not in mallard ducks. Although no data are available on the toxicity of sodium acifluorfen to wild mammals, it is slightly toxic to rats in laboratory studies. No effects were seen in a rat reproductive toxicity study, but effects were seen in a rat developmental toxicity study.

Sodium acifluorfen is known to leach through soil to groundwater under certain conditions as a result of label use. Use of this chemical where soils are permeable (sandy/loamy soils) and water tables are shallow could result in contamination of groundwater. Use of irrigated water in such areas will increase the likelihood of groundwater contamination.

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 according to label instructions, contact your State Pesticide or Environmental Protection Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Non refillable container. Do not reuse this container. Refer to the product label for specific container disposal instructions.



14. TRANSPORT INFORMATION

US DOT (shipments by land)

DOT PROPER SHIPPING NAME: Not regulated by DOT

Marine Pollutant: No

DOT Emergency Response Guide: N/A

IMDG (shipments by vessel)

Not regulated under IMDG.

IATA (shipments by air)

NA3082, Other regulated substance, liquid, N.O.S. (sodium acifluorfen), PG III, 9

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:

DANGER. CORROSIVE. Causes irreversible eye damage. Harmful if swallowed, inhaled or absorbed through the skin. Do not get in eyes, on skin or clothing. Wear goggles or face shield when handling. Do not breathe vapor. In case of contact, immediately remove contaminated clothing and shoes. Wash contaminated clothing with soap and hot water before re-use. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

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.

SARA Title III - Section 302 Extremely Hazardous Substances Not listed

SARA Title III - Section 311/312 Hazard Categories Immediate, Delayed

SARA Title III - Section 312 Threshold Planning Quantity

SARA Title III - Section 313 Reportable Ingredients

Acifluorfen, Sodium Salt [CAS No. 62476-59-9]

CERCLA -

N/A

CALIFORNIA PROP 65 STATUS -

▲ WARNING: This product can expose you to sodium acifluorfen, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

16. OTHER INFORMATION

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.

REFER TO THE PRODUCT LABEL FOR TERMS AND CONDITIONS OF USE

Warranty Disclaimer

Atticus, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth in the product label. Atticus, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

The terms of the Warranty Disclaimer cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Atticus, LLC or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer in any manner.

SDS Version: 1.2

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