SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS:

EMERGENCY TELEPHONE NUMBERS:

RedEagle International LLC 1925 E. Edgewood Dr – Ste. 105 FOR 24 HOUR EMERGENCY MEDICAL ASSISTANCE CALL: 1–866–303–6952 FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call

CHEMTREC 1-800-424-9300

Lakeland, Florida 33803

PRODUCT NAME: ACIFLUORFEN 2

EPA REG NO: 85678-18 PRODUCT USE: HERBICIDE

SECTION 2 – COMPOSITION, INFORMATION OF INGREDIENTS

Active Ingredient	CAS No.	Weight	OSHA PEL
Acifluorfen, sodium salt	62476-59-9	20.1%	N/A

SECTION 3 - HAZARDS INDENTIFICATION SUMMARY

EMERGENCY OVERVIEW: Corrosive. Causes irreversible eye damage. Harmful if swallowed or absorbed through skin or inhaled. Do not get in eyes or on clothing. Avoid contact with skin and breathing vapor or spray mist.

POTENTIAL HEALTH EFFECTS:

Eyes Risk of serious damage to eyes. Causes irreversible eye damage.

SkinModerate dermal irritantIngestionHarmful if swallowed.InhalationAvoid inhalation.

CARCINOGENICITY: Acifluorfen is classified by EPA as a Group C carcinogen (possible human carcinogen). At high enough doses to cause the biochemical and histopathological changes in livers of rodents, Acifluorfen is likely to be carcinogenic to humans but unlikely to be carcinogenic at doses below those causing these changes.

SECTION 4 – FIRST AID MEASURES

FIRST AID		
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 on skin or clothing:	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call a poison control center or doctor for treatment advice. 	
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 the poison control center or doctor. Do not give anything by mouth to an unconscious person. 	
If inhaled:	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice. 	

Have the product container or label with you when calling a poison control center, doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 seven days a week, 6:30 am to 4:30 pm Pacific Time (NPIC Web site: www.npic.orst.edu)

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

SECTION 5 - FIRE FIGHTING MEASURES

FLASHPOINT (METHOD): Not available **FLAMMABLE LIMITS (LFL – UFL)** Not available

FIRE AND EXPLOSION HAZARD: Toxic materials (hydrogen chloride, hydrogen fluoride, nitrogen oxide) may be

generated in a fire.

EXTINGUISHING MEDIA: Water spray, Carbon dioxide (CO2), Dry chemical

HAZARDOUS COMBUSTION PRODUCTS: Elevated temperatures can cause decomposition to potentially toxic gases

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled:

Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing, and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Do not store below 32°F.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation, packaging and use of this product. For commercial applications and/or on-farm applications consult the product label.

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: Wear goggles or face shield

Skin Protection: Wear long sleeved shirt and long pants, shoes plus socks, and chemical resistant gloves. **Ingestion:** Do not eat, drink, or use tobacco when using this product. Avoid contact with eyes, skin, and

clothing. Wash thoroughly immediately after handling this product.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Light yellow **Appearance:** pH: 9.3 **Physical State:** Liquid Melting Point/Range: $> 100^{\circ}C$ Odor: Mildly antiseptic Water Solubility: Not available **Boiling Point/Range:** Not available **Vapor Pressure:** Not available

 Viscosity:
 10.84 CST @ 25°C

 Density:
 1.157 g/cm³

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended storage conditions

CONDITIONS TO AVOID: Freezing temperatures

INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and nitrogen - Hydrogen chloride - Hydrogen

fluoride.

HAZARDOUS POLYMERIZATION: Hazardous polymerization does not occur

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Acute Toxicity Profile:

Acifluorfen: Acute Oral (rats): LD50 = 2025 mg/kg (males)

LD50 = 1370 mg/kg (females)

Acute Oral (dog): LD50 = 186 mg/kg

Acute Dermal (rabbits): LD50 = >2000 mg/kg (males/females)

Acute Inhalation: LC50 = >6.9 mg/L
Primary Eye Irritation: Severe eye irritant
Primary Skin Irritation: Moderate dermal irritant
Dermal Sensitization: Not a skin sensitizer

Carcinogenicity: Acifluorfen is classified by EPA as a Group C carcinogen (possible human carcinogen). At high enough doses to cause the biochemical and histopathological changes in livers of rodents, Acifluorfen is likely to be carcinogenic to humans but unlikely to be carcinogenic at doses below those causing these changes.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark, except as specified on this label for application to rice. Do not contaminate water when disposing of equipment washwaters. Do not apply when weather conditions favor drift from target area.

> GROUND WATER ADVISORY: Sodium acifluorfen is known to leach through soil to groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable (sandy or 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.

Sodium Acifluorfen: Aquatic:

Rainbow trout -96 hrs LC50 = 54 mg a.i/L Bluegill sunfish – 96 hrs LC50 = 31 mg a.i/L (static) Daphnia magna - 48 hrs EC50 = 28 mg a.i/L Channel catfish – 96 hrs LC50 = 80 mg/L Grass shrimp - 96 hrs LC50 =189 mg/L Fiddler crab - 96 hrs LC50 = >1,000 mg/L Fresh water clam - 96 hrs LC50 = 64 mg a.i/L Eastern Oyster – 48 hrs LC50 = 31.3 mg a.i/L

Avian:

Bobwhite quail - LC50 > 10,000 mg/kg Mallard duck - LC50 > 10,000 mg/kg

SECTION 13 – DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL:

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse according to label instructions. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. If rinsate cannot be used, follow pesticide disposal instructions.

SECTION 14 - TRANSPORT INFORMATION

DOT: Not regulated ICAO: Not regulated IATA: Not regulated IMDG/IMO: Not regulated

SECTION 15 - REGULATORY INFORMATION

EPCRA SARA Title III Classification

Section 311/312 Hazard Class: Chronic health hazard; Acute health hazard Section 313 Toxic Chemical Class: Acifluorfen, sodium salt (CAS No. 62476-59-9)

Clean Air Act, Section 112 Hazardous Air Pollutants (HAP's) (see 40 CFR 61): None

CERCLA: No

RCRA: No

California Proposition 65: Acifluorfen sodium is listed as a chemical known to cause cancer.

SECTION 16 - OTHER INFORMATION NFPA HAZARD RATINGS: HEALTH: 2 0 Minimal FLAMMABILITY: 1 1 Slight REACTIVITY: 0 2 Moderate 3 High 4 Severe

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REVISED DATE: New

REVISED FOR:

REVISED BY: Gilbert H Gonzalez

APPROVED BY: Yingxue Yu