

MATERIAL SAFETY DATA SHEET

Alligare Rotary 2 SL™

Alligare, LLC

Emergency Phone: Chemtrec 800-424-9300

Effective Date: February 20, 2007

EPA Reg. No. 81927-6

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT NAME: Alligare Rotary 2 SL™

Active Ingredient: Isopropylamine salt of imazapyr

Chemical Name: 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid, salt with 2-propanamine (1:1)

Chemical Formula: C₁₃H₁₅N₃O₃C₃H₉N

COMPANY IDENTIFICATION:

Alligare, LLC

13 North 8th Street

Opelika, AL 36801

2. COMPOSITION/INFORMATION ON INGREDIENTS:

Isopropylamine salt of imazapyr

CAS No. 81510-83-0

27.8%

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Keep out of the reach of children. Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with the skin, eyes and clothing.

POTENTIAL HEALTH HAZARDS:

Acute Toxicity: Relatively nontoxic after single ingestion. Slightly toxic after short-term skin contact. Relatively nontoxic after short-term inhalation.

Irritation: May cause slight but temporary irritation to the eyes. May cause slight irritation to the skin.

Sensitization: Skin sensitizing effects were not observed in animal studies.

Repeated Dose Toxicity: No other known chronic effects.

NFPA HAZARD CODES:

Health-1 / Flammability-1 / Reactivity-0

4. FIRST AID

NOTE: Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

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 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 INHALED: Move person to fresh air. 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.

5. FIRE-FIGHTING MEASURES

Flash point: N/D

Flammable Limits (LFL-UFL): N/D

Fire and Explosion Hazards: None known.

Extinguishing Medium: Foam, dry extinguishing media, carbon dioxide, water spray

Fire Fighting Instructions: Firefighters should be equipped with self-contained breathing apparatus and turnout gear. Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Clear area and take appropriate protective measures. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental Precautions: Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

Cleanup: Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. HANDLING AND STORAGE

Handling: The following recommendations are for Manufacturing, Commercial Blending, and Packaging Workers. Pesticide Applicators and Workers must refer to the Product label and directions for use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard (40 CFR Part 170). Ensure adequate ventilation. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition – No Smoking. Keep container tightly sealed. Protect contents from the effects of light. Protect against heat. Protect from air. Handle and open container with care. Do not open until ready to use. Once container is opened, contents should be used as soon as possible. Avoid aerosol formation. Avoid dust formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. Follow label warnings even after container is emptied. The substance/product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapors. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion: The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Sources of ignition should be kept well clear. Avoid extreme heat. Keep away from oxidizable substances. Electrical equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

Storage: Do not store below 10°F. Keep in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Pesticide Applicators and Workers: Refer to the product label attached to the product.

Recommendations for Manufacturing, Commercial Blending, and Packaging Workers:

Respiratory protection: Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapors. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection: Chemical resistant protective gloves. Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection: Safety glasses with side-shields (frame goggles)

Body protection: Body protection must be chosen depending on activity and possible exposure, e.g., head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures: Wear long-sleeved work short and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Blue Transparent Liquid

pH: 6.46

Melting Point: N/A

Density: 1.06 g/mL

Viscosity: 3.78 mm²/s (20°C); 2.06 mm²/s (40°C)

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme temperatures. Avoid prolonged exposure to extreme heat. Avoid contamination. Avoid electro-static discharge. Avoid prolong storage.

SUBSTANCES TO AVOID: Oxidizing agents, strong alkalis.

HAZARDOUS REACTIONS: This product is chemically stable. Hazardous polymerization will not occur. No hazardous reactions if stored and handled as prescribed/indicated.

HAZARDOUS DECOMPOSITION PRODUCTS: No hazardous decomposition products if stored and handled as prescribed/indicated. Prolonged thermal loading can result in products of degradation being given off.

THERMAL DECOMPOSITION: Possible thermal decomposition products: Carbon monoxide, carbon dioxide, nitrogen oxide. Stable at ambient temperature. If product is heated above decomposition temperature, toxic vapors may be released. If product is heated above decomposition temperature, hazardous fumes may be released.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY

LD₅₀ > 2000 mg/kg (rat)

ACUTE DERMAL TOXICITY

LD₅₀ > 2000 mg/kg (rat)

ACUTE INHALATION TOXICITY

Inhalation LC₅₀ > 5.22 mg/L (rat)

EYE IRRITATION: Moderately-irritating (rabbit)

SKIN IRRITATION: Non-irritating (rabbit)

SKIN SENSITIZATION: Non-sensitizer

CARCINOGENICITY:

ACGIH: Not Listed

IARC: Not Listed

NTP: Not Listed

OSHA: Not Listed

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

REPRODUCTIVE TOXICITY: No evidence in animal studies.

DEVELOPMENTAL TOXICITY / TERATOGENICITY: No evidence in animal studies.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: DO NOT apply this product to water except as specified on product label. This herbicide is phytotoxic at extremely low concentrations. Non-target plants may be adversely affected from drift.

AVIAN TOXICITY

LC₅₀ > 5000 ppm (mallard duck)

FISH TOXICITY

LC₅₀ (96-hr) > 100 mg/L (Rainbow trout)

EC₅₀ (48-hr) > 100 mg/L (*Daphnia magna*)

BEE TOXICITY

LD₅₀ > 100 µg/bee

13. DISPOSAL CONSIDERATIONS

Note that chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

14. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: Not regulated by DOT

DOT HAZARD CLASS OR DIVISION: N/A

DOT UN/NA NUMBER: N/A

DOT PACKING GROUP: N/A

REPORTABLE QUANTITY: N/A

MARINE POLLUTANT: Not Listed

DOT EMERGENCY RESPONSE GUIDE: N/A

15. REGULATORY INFORMATION

FIFRA –

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act. The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide.

OSHA HAZARD COMMUNICATION STANDARD STATUS

Not Regulated

SARA Title III – Section 302 Extremely Hazardous Substances

Not listed

SARA Title III – Section 311/312 Hazard Categories

None

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

None

CERCLA –

Not Listed

California Prop 65 Status –

Not Listed

16. OTHER INFORMATION

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

DISCLAIMER:

THE INFORMATION IN THIS MSDS IS BASED ON DATA AVAILABLE AS OF THE REVISION DATE GIVEN HEREIN, AND BELIEVED TO BE CORRECT. CONTACT ALLIGARE, LLC TO CONFIRM IF YOU HAVE THE MOST CURRENT MSDS. JUDGMENTS AS TO THE SUITABILITY OF THE INFORMATION HEREIN FOR THE INDIVIDUAL'S OWN USE OR PURPOSES IS NECESSARILY THE INDIVIDUAL'S OWN RESPONSIBILITY. ALTHOUGH REASONABLE CARE HAS BEEN TAKEN IN THE PREPARATION OF SUCH INFORMATION, ALLIGARE, LLC EXTENDS NO WARRANTIES, MAKES NO REPRESENTATIONS, AND ASSUMES NO RESPONSIBILITY AS TO THE ACCURACY OR SUITABILITY OF SUCH INFORMATION FOR APPLICATION TO THE INDIVIDUAL'S PURPOSES OR THE CONSEQUENCES OF ITS USE.

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). This MSDS 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.