

MATERIAL SAFETY DATA SHEET

Picloram+D Herbicide

Alligare, LLC

Emergency Phone: Chemtrec 800-424-9300

Effective Date: March 29, 2007

EPA Reg. No. 42750-80-81927

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT NAME: Picloram+D

DESCRIPTION: A water soluble liquid herbicide.

COMPANY IDENTIFICATION:

Alligare, LLC

13 North 8th Street

Opelika, AL 36801

2. COMPOSITION/INFORMATION ON INGREDIENTS:

| Ingredient | Chemical Name | Formula | CAS # | Composition |
|----------------------------------|--|---|------------|-------------|
| Picloram | 4-amino-3,5,6-trichloropicolinic acid | C ₆ H ₃ Cl ₃ N ₂ O ₂ | 1918-02-1 | 10.2% |
| 2,4-D Triisopropanolamine (TIPA) | 2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt | C ₈ H ₆ Cl ₂ O ₃ | 32341-80-3 | 39.6% |

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing.

Health Hazards: Eye irritant with corneal injury possible. Harmful if swallowed.

Physical Hazards: May release toxic fumes (hydrogen chloride, oxides of nitrogen and chlorinated pyridine) if burned.

Environmental Hazards: Picloram is highly toxic to certain terrestrial plant species and is moderately mobile in certain soil types. 2,4-D TIPA is toxic to aquatic organisms.

4. FIRST AID

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

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.

NOTE TO PHYSICIAN: Probably mucosal damage may contraindicate the use of gastric lavage.

5. FIRE-FIGHTING MEASURES

Flash point: > 44°C (> 111°F)

Flammable Limits (LFL-UFL): Unknown

Fire and Explosion Hazards: May thermally decompose in fire releasing irritating and toxic gasses.

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

Fire Fighting Equipment: Firefighters should be equipped with self-contained breathing apparatus and turnout 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.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Isolate area and keep unnecessary and unprotected personnel from entering. Wear suitable personal protective clothing and equipment as described in Section 8 of this document.

Small Spills: Absorb using sand, vermiculite or other inert absorbent. Place contained material in appropriate container for disposal.

Large Spills: Dike spillage and recover and retain as much free liquid as possible for reuse. Pick up remainder with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. After removal, thoroughly clean contaminated area with water. Collect wash water for approved disposal.

7. HANDLING AND STORAGE

Handling: Use only in a well-ventilated area. Wear suitable personal protective clothing and equipment.

Storage: 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.

Engineering Controls: Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Local mechanical exhaust ventilation may be required. Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

For containers of 5 gallons or more: Do not open pour product from this container. A mechanical system (such as probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], the handler PPE requirements may be reduced or modified as specified in the WPS

Personal Protective Equipment (PPE):

Eyes – Safety goggles or full face respirator if vapors cause eye discomfort.

Clothing – Long-sleeved shirt and long pants. Shoes plus socks.

Gloves – Chemical resistant gloves such as barrier laminate, butyl, nitrile or neoprene rubber, polyvinyl chloride (PVC) or viton.

Respirator – When handling in enclosed areas or areas with limited ventilation, use a respirator with either an organic vapor cartridge with a pre-filter approved for pesticides (MSHA/NIOSH TC-23C) or a canister approved for pesticides (MSH/NIOSH TC-14G).

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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. After each day of use, clothing or PPE must not be reused until it has been cleaned

For Containers over 1 Gallon but Less Than 5 Gallons: Mixers and loaders who do not use a mechanical system (such as probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to other required PPE.

General safety and hygiene measures: 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). Remove PPE immediately after handling this product; wash the outside of gloves before removing.

Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. As soon as possible, wash thoroughly and change into clean clothing. Keep away from food, drink and animal feed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Amber Liquid

Odor: Alcohol-like

pH: 6.5 – 7.0

Specific Gravity: 1.14 @ 20°C

Vapor Pressure: 32mmHg @ 20°C

Solubility: Miscible

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal use and storage conditions. May decompose if heated.

CONDITIONS TO AVOID: Temperatures above 40°C (105°F) and below 6°C (40°F).

SUBSTANCES TO AVOID: Strong acids and oxidizing materials.

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: Hydrogen chloride and oxides of nitrogen.

HAZARDOUS POLYMERIZATION: Does not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY

LD₅₀ (rat): > 2000 mg/kg

ACUTE DERMAL TOXICITY

LD₅₀ (rat): > 2000 mg/kg

ACUTE INHALATION TOXICITY

Unknown

EYE IRRITATION: Moderate, may cause corneal injury

SKIN IRRITATION: Moderate

SKIN SENSITIZATION: Potential sensitizer

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

CARCINOGENICITY:

ACGIH: Not Listed

IARC: Not Listed

NTP: Not Listed

OSHA: Not Listed

MUTAGENIC TOXICITY: Little 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: This herbicide is toxic to some plants at very low concentrations. Non-target plants may be adversely affected from drift. Do NOT apply this product directly to water, or to areas where surface water is present, or to intertidal areas between the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Picloram is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by disposal.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by the use according to 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: 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

CONTAINERS Smaller than 5L (1.3 Gallons) NOT Shipped by Air: Not Regulated by DOT

CONTAINERS Shipped by Air or Non-Bulk Containers Larger than 5L (1.3 Gallons):

DOT PROPER SHIPPING NAME: NA1993, COMPOUNDS, WEED KILLING, LIQUID, 3, PG III, Marine Pollutant

DOT HAZARD CLASS OR DIVISION: 3

DOT UN/NA NUMBER: 1993

DOT PACKING GROUP: III

REPORTABLE QUANTITY: N/A

DOT EMERGENCY RESPONSE GUIDE: 128

MARINE POLLUTANT: Yes (2,4-D)

BULK CONTAINERS / DRUMS:

DOT PROPER SHIPPING NAME: NA1993, COMPOUNDS, WEED KILLING, LIQUID, 3, PG III, Marine Pollutant

DOT HAZARD CLASS OR DIVISION: 3

DOT UN/NA NUMBER: 1993

DOT PACKING GROUP: III

REPORTABLE QUANTITY: 100lbs. (2,4-D)

DOT EMERGENCY RESPONSE GUIDE: 128

MARINE POLLUTANT: Yes (2,4-D)

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

Hazardous Chemical

SARA Title III – Section 302 Extremely Hazardous Substances

Not listed

SARA Title III – Section 311/312 Hazard Categories

Immediate, Delayed, Fire

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

Picloram – 10% (CAS No. 1918-02-1)

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.