

**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION****COMPANY ADDRESS:**

ALBAUGH, LLC  
Ankeny, IA 50021

**EMERGENCY TELEPHONE NUMBERS:**

(800) 424-9300 (CHEMTREC, transportation and spills)

PRODUCT NAME

: **GUNSLINGER**

CHEMICAL NAME

: Picloram

PRODUCT USE

: Herbicide

PRODUCT CODE

: EPA Reg. No 42750-80

**SECTION 2 - HAZARDS IDENTIFICATION SUMMARY**

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

Liquid

**HEALTH HAZARDS:** DANGER.

Corrosive. Causes irreversible eye damage. Harmful if swallowed.

**PHYSICAL HAZARDS:** Flammable liquid. May release toxic fumes if burned.

**ENVIRONMENTAL HAZARDS:**

Picloram is highly toxic to certain terrestrial plant species and is very persistent and highly mobile in certain soil types. 2,4-D TIPA is toxic to aquatic organisms.

**SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS**

| COMPONENT                           | PERCENTAGE | CAS NUMBER |
|-------------------------------------|------------|------------|
| Picloram Triisopropanolamine (TIPA) | 10.2       | 6753-47-5  |
| 2,4-D Triisopropanolamine (TIPA)    | 39.6       | 32341-80-3 |
| Isopropanol                         | 5.0        | 67-63-0    |
| Other ingredients                   | 45.2       | N/A        |

**SECTION 4 - FIRST AID MEASURES**

First Aid responders should use protective equipment in Section 8 if there is a potential for exposure to product.

**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 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 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 mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

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

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

**SECTION 5 - FIRE FIGHTING MEASURES**

National Fire Protection Rating (NFPA)

|  |   |
|--|---|
| HEALTH   | 3 |
| FLAMMABILITY                                     | 2 |
| REACTIVITY                                       | 0 |
| 4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal |   |

**FLASHPOINT:** 111°F (43.8°C)

**EXTINGUISHING MEDIA:** Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

**FIRE AND EXPLOSION HAZARD:** May decompose in fire due to thermal decomposition, releasing irritating and toxic gases.

**FIRE FIGHTING INSTRUCTIONS:** Evacuate area and fight fire upwind from a safe distance to avoid possible hazardous fumes and decomposition products. Dike and collect water used to fight fire to prevent environmental damage due to run off. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water run off.

Minimize use of water to prevent environmental contamination. Contact your State Pesticide or Environmental Control Agency, or nearest EPA Regional Office for guidance on disposal.

**FIRE FIGHTING EQUIPMENT:** Self-contained breathing apparatus with full facepiece and protective clothing.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**IN CASE OF SPILLS OR LEAKS:** Clean up spills immediately, observing precautions in Section 8 of this document. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

**SMALL SPILL:** Absorb small spills on sand, vermiculite or other inert absorbent. Place contaminated material in appropriate container for disposal.

**LARGE SPILL:** Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify, and scrape up for disposal. After removal, clean contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container.

Minimize use of water to prevent environmental contamination

**SECTION 7 - HANDLING AND STORAGE**

KEEP OUT OF REACH OF CHILDREN!

Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate.

**HANDLING:** Use only in a well-ventilated area. Wear appropriate safety equipment when handling.

**STORAGE:** Store in original container with lid tightly closed. Keep away from food, feed and drinking water. Combustible liquid, store in a well ventilated, dry place away from heat and other sources of ignition.

**SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION****EXPOSURE LIMITS (8 hour TWA, ppm):**

| COMPONENT                           | OSHA PEL               | ACIGH TLV              |
|-------------------------------------|------------------------|------------------------|
| Picloram Triisopropanolamine (TIPA) | Not listed             | Not listed             |
| 2,4-D Triisopropanolamine (TIPA)    | 10 mg/M3<br>(for acid) | 10 mg/M3<br>(for acid) |
| Isopropanol                         | Not listed             | 200 ppm                |

**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 facility and a safety shower.

**PERSONAL PROTECTIVE EQUIPMENT:**

**EYE PROTECTION** - Safety goggles or full face shield

**CLOTHING** - Long-sleeved shirt and long pants, Shoes plus socks. Chemical resistant apron when applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

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

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.

**USER SAFETY RECOMMENDATIONS:** 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. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

|                                   |  |
|-----------------------------------|--|
| <b>Appearance:</b>                | Liquid   |
| <b>Odor:</b>                      | No data  |
| <b>pH:</b>                        | 6.4 – 7.4  |
| <b>Melting Point:</b>             | Not applicable   |
| <b>Boiling Point:</b>             | No data  |
| <b>Flash Point:</b>               | 43.8°C   |
| <b>Evaporation Rate:</b>          | No data  |
| <b>Flammability:</b>              | No data  |
| <b>Flammability Limits:</b>       | No data  |
| <b>Vapor Pressure:</b>            | 8 x 10 <sup>-11</sup> mPa (25°C) (Picloram)<br>1.86 x 10 <sup>-2</sup> mPa (25°C) (2,4-D)  |
| <b>Vapor Density:</b>             | Not applicable   |
| <b>Density:</b>                   | 1.12 – 1.16 g/ml (9.35 – 9.68 lb/gl)*  |
| <b>Solubility:</b>                | Emulsifies   |
| <b>Partition Coefficient:</b>     | log Pow = 1.9 (20°C, 0.1N HCl, neutral species) (Picloram)<br>log Pow = 2.58-2.83 (pH 1), 0.04-0.33 (pH 5), -0.75 (pH 7) (2,4-D) |
| <b>Auto-Ignition Temperature:</b> | No data  |
| <b>Decomposition Temperature:</b> | No data  |
| <b>Viscosity:</b>                 | 36.46 cST (20°C); 13.00 cSt (40°C)   |

\*Listed density is an approximate value and does not necessarily represent that of a specific batch.

### SECTION 10 - STABILITY AND REACTIVITY

**PRODUCT REACTIVITY:** None known

**CHEMICAL STABILITY:** Stable, however may decompose if heated.

**HAZARDOUS REACTION/POLYMERIZATION:** Product will not undergo polymerization.

**CONDITIONS TO AVOID:** Avoid temperatures above (105°F, 40°C) and below 40°F (6°C).

**INCOMPATIBLE MATERIALS:** Strong acids and oxidizing materials.

**HAZARDOUS COMBUSTION PRODUCTS:** Hydrogen chloride, Oxides of nitrogen, Chlorinated pyridine.

### SECTION 11 - TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY:**

|                                   |                          |
|-----------------------------------|--------------------------|
| Oral LD <sub>50</sub> (rat)       | 1030 mg/kg               |
| Dermal LD <sub>50</sub> (rat)     | >5000 mg/kg              |
| Inhalation LC <sub>50</sub> (rat) | >2.05 mg/L               |
| Eye Irritation (rabbit)           | Severely irritating      |
| Skin Irritation (rabbit)          | Slightly irritating      |
| Sensitization (guinea pig)        | Not a contact sensitizer |

**CARCINOGEN STATUS:**

|      |              |
|------|--------------|
| OSHA | - Not listed |
| NTP  | - Not listed |
| IARC | - Not listed |

**TERATOGENICITY:** Laboratory tests have shown decreased fetal body weights at maternally toxic doses.

**MUTAGENICITY:** Weight of evidence indicates that 2,4-D acid is not mutagenic

### SECTION 12 - ECOLOGICAL INFORMATION

**ENVIRONMENTAL SUMMARY:** This pesticide is toxic to some plants at very low concentrations. Non-target plants may be adversely affected if pesticide is allowed to drift from areas of application. This pesticide may be toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on label.

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.

**FATE:** 2,4-D TIPA salt rapidly disassociates to the parent acid in the environment. Typical half-life of the 2,4-D acid is from a few days to a few weeks. Picloram TIPA salt rapidly disassociates to the parent acid in the environment. Typical half-life of picloram acid is 6 - 24 months depending on soil type and weather conditions.

**FISH TOXICITY:** (2,4-D acid)

|  |          |
|--|----------|
| 96 hour LC <sub>50</sub> , Rainbow trout – | 250 mg/L |
| 96 hour LC <sub>50</sub> , Bluegill –      | 524 mg/L |

**AVIAN TOXICITY:** (2,4-D acid)

Dietary LC<sub>50</sub>, Bobwhite quail - 500 mg/Kg  
Dietary LC<sub>50</sub>, Mallard duck - > 5,000 ppm

**BEE TOXICITY:** (2,4-D acid) – 0.1 mg/bee

**FISH TOXICITY:** (Picloram acid)

96 hour LC<sub>50</sub>, Rainbow trout - >100 mg/L  
96 hour LC<sub>50</sub>, Bluegill - >100 mg/L

**AVIAN TOXICITY:** (Picloram acid)

Dietary LC<sub>50</sub>, Bobwhite quail - >10,000 mg/Kg  
Dietary LC<sub>50</sub>, Mallard duck - >10,000 mg/Kg

**BEE TOXICITY:** (Picloram acid) - Non-toxic

### **SECTION 13 - DISPOSAL CONSIDERATIONS**

Do not contaminate water, food or feed by storage or disposal.

**WASTE:** 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:** Non-refillable containers: Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Refillable container: Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

Refer to the container label to determine if it is refillable and for complete cleaning and disposal instructions.

### **SECTION 14 - TRANSPORT INFORMATION**

**SHIPPING DESCRIPTION:**

|                               |  |
|-------------------------------|--|
| Containers < 30 gallons:      | Not regulated by DOT   |
| Containers ≥ 30 gallons:      | NA1993, Combustible Liquid, N.O.S. (contains isopropanol), PG III, RQ (2,4-D salt) |
| <b>DOT HAZARD CLASS:</b>      | Combustible liquid (≥ 30 gallons)  |
| <b>IDENTIFICATION NUMBER:</b> | NA1993   |
| <b>DOT PACKING GROUP:</b>     | PG III   |

**SECTION 15 - REGULATORY INFORMATION**

|                                    |  |
|------------------------------------|--|
| <b>CERCLA REPORTABLE QUANTITY:</b> | 100 Lbs. (2,4-D acid equivalent)   |
| <b>SARA TITLE III STATUS:</b>      |  |
| 311/312 Hazard Categories –        | Immediate & Delayed Health Hazard, Fire Hazard                                   |
| 313 Toxic Chemicals –              | Isopropyl alcohol, 2,4-D acid  |
| <b>CALIFORNIA PROP 65:</b>         | Not listed   |
| <b>TSCA:</b>                       | This product is exempted from TSCA because it is solely for FIFRA regulated use. |

**SECTION 16 - OTHER INFORMATION**

|                           |  |   |
|---------------------------|--|---|
| HMIS<br>HAZARD<br>RATINGS | HEALTH   | 1 |
|                           | FLAMMABILITY                                     | 1 |
|                           | PHYSICAL HAZARD                                  | 0 |
|                           | 4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal |   |

**DISCLAIMER:** The information presented herein is based on available data from reliable sources and is correct to the best of Albaugh's knowledge. Albaugh makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions.

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. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling.

It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

|                      |                            |
|----------------------|----------------------------|
| <b>REVISED DATE:</b> | October, 2014              |
| <b>REFERENCE:</b>    | Revised for GHS compliance |