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: TRIUMPH 22K
CHEMICAL NAME: Potassium salt of picloram
PRODUCT USE: Herbicide
PRODUCT CODE: EPA Reg. No 42750-79

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

Clear amber liquid

HEALTH HAZARDS: WARNING. Causes substantial but temporary eye injury. Prolonged or repeated skin contact may cause allergic reactions in some individuals.

PHYSICAL HAZARDS: May release toxic fumes if burned.

ENVIRONMENTAL HAZARDS: Picloram is highly toxic to non-target plant species and is very persistent and highly mobile in certain soil types.

SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>PERCENTAGE</th>
<th>CAS NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picloram, Potassium salt</td>
<td>24.4</td>
<td>2545-60-0</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>75.6</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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 treatment advice.

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

Have the 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)

<table>
<thead>
<tr>
<th>HEALTH</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAMMABILITY</td>
<td></td>
</tr>
<tr>
<td>REACTIVITY</td>
<td></td>
</tr>
<tr>
<td>4=Severe</td>
<td>3=Serious</td>
</tr>
</tbody>
</table>

FLASHPOINT: Not applicable

EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, or water spray.

FIRE AND EXPLOSION HAZARD: May decompose in fire 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.

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!

HANDLING: Use only in a well-ventilated area. Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate.

STORAGE: Store in original container with lid tightly closed. Keep away from food, feed and drinking water. The active ingredient in this product may crystallize and settle out of solution if product is exposed to subfreezing temperatures. Under these conditions, warm product to at least 40°F and agitate well to dissolve any crystallized material prior to use.
SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 hour TWA, ppm):

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA PEL</th>
<th>ACIGH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picloram potassium salt</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to keep minimize exposure to airborne contaminants. 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 glasses with side shields
CLOTHING - Long-sleeved shirt and long pants, Shoes plus socks.
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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear amber liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>No data</td>
</tr>
<tr>
<td>pH</td>
<td>8.2 – 9.2</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>No data</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Will not flash</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Flammability Limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>$8 \times 10^{11}$ mPa (25°C) (Picloram)</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Density</td>
<td>$1.15 - 1.21$ g/ml (9.60 – 10.10 lb/gl)*</td>
</tr>
<tr>
<td>Solubility</td>
<td>Emulsifies</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>log Pow = 1.9 (20°C, 0.1N HCl, neutral species) (Picloram)</td>
</tr>
<tr>
<td>Auto-Ignition Temperature</td>
<td>No data</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data</td>
</tr>
<tr>
<td>Viscosity</td>
<td>2.66 cST (20°C); 1.62 cSt (40°C)</td>
</tr>
</tbody>
</table>

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

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:
Oral LD₅₀ (rat) >5000 mg/kg
Dermal LD₅₀ (rat) >5000 mg/kg
Inhalation LC₅₀ (rat) >2.05 mg/L
Eye Irritation (rabbit) Moderately 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: Not known to exhibit reproductive or teratogenic (birth defect) effects.

MUTAGENICITY: No evidence of mutagenic effects during in vivo or in vitro studies.

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. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Do not contaminate water used for irrigation or domestic purposes by cleaning of equipment or disposal of wastes or rinsates. Do not allow runoff or spray to contaminate wells, irrigation ditches or any body of water used for irrigation or domestic purposes. Do not make application when circumstances favor movement from treatment site.

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.

FATE: Picloram potassium salt disassociates to the parent acid after application. Picloram acid is moderately persistent with a soil half-life of 6 - 24 months depending on soil type and weather conditions. Picloram is highly mobile in soil.
**FISH TOXICITY:** (Picloram acid)
Acute LC₅₀, Rainbow trout - 5.5 mg/L
Acute LC₅₀, Bluegill - 15 mg/L

**AVIAN TOXICITY:** (Picloram acid)
Dietary LC₅₀, Bobwhite quail - > 10,000 mg/Kg
Dietary LC₅₀, Mallard duck - > 10,000 mg/Kg

**BEE TOXICITY:** (Picloram acid) - > 100 ug/bee

**SECTION 13 - DISPOSAL CONSIDERATIONS**

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

**WASTE:** Pesticide wastes are toxic. Dispose of in accordance with applicable Federal, state and local laws and regulations at an approved facility.

**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:** Not regulated by DOT
(Ground transport)

**DOT HAZARD CLASS:** N/A
**UN NUMBER:** N/A
**DOT PACKING GROUP:** N/A

**SECTION 15 - REGULATORY INFORMATION**

**CERCLA REPORTABLE QUANTITY:** Not listed

**SARA TITLE III STATUS:**
311/312 Hazard Categories – Immediate & Delayed Health Hazard
313 Toxic Chemicals – None known

**CALIFORNIA PROP 65:** Not listed
SECTION 16 - OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS HAZARD RATINGS</th>
<th>HEALTH</th>
<th>1</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>FLAMMABILITY</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PHYSICAL HAZARD</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal</td>
<td></td>
</tr>
</tbody>
</table>

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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.

**REVISED DATE:** October, 2014

**REFERENCE:** Revise for GHS compliance.