

MATERIAL SAFETY DATA SHEET

Phoenix Environmental Care, LLC
P.O. Box 370
Valdosta, GA 31603-0370

General Information No.
In Case of Emergency, Call
PROSAR:

229-245-8845
888-875-1724

I. PRODUCT IDENTIFICATION

Product Name: Kraken

Active Ingredient: Triclopyr [(3,5,6-trichloro-2-pyridyl)oxy]acetic acid, triethylamine salt

II. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS Number</u>	<u>% by Wt.</u>
Triclopyr Triethylamine salt	57213-69-1	44.40%
Ethylenediaminetetraacetic acid (EDTA)	64-02-8	< 5.0

III. HAZARDS IDENTIFICATION

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

HEALTH HAZARDS

Severe eye irritant, corrosive. May cause corneal injury.

PHYSICAL HAZARDS

Combustible liquid. May release toxic fumes if burned.

ENVIRONMENTAL HAZARDS

Triclopyr is highly toxic to certain terrestrial plant species. Potential groundwater contaminant. Moderately persistent and mobile in certain soil types.

IV. FIRST AID MEASURES

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 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.

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.

V. FIRE FIGHTING MEASURES

Flashpoint (method):	141° F (61° C) (Closed cup method)
Flammable Limits (LFL - UFL):	Unknown
Fire and Explosion Hazard:	May decompose in fire due to thermal decomposition, releasing toxic gases.
Extinguishing Media:	Use foam, dry chemical, carbon dioxide, or water spray when fires involve this material.
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.
Fire Fighting Equipment:	Self-contained breathing apparatus with full facepiece and protective clothing.
Hazardous Combustion Products:	Hydrogen chloride, Oxides of nitrogen, Chlorinated pyridine, Phosgene.

VI. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Wear appropriate personal protection equipment. (See Section VIII Exposure Controls, Personal Protection.)

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. Clean contaminated area thoroughly with water. Pick up wash liquid with absorbent and place in a disposable container.

VII. HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

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.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS (8 hour TWA, ppm): Refer to Section III.

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 respirator if vapors cause eye discomfort.
Clothing: Long-sleeved shirt and long pants, Shoes plus socks.
Gloves: Chemical resistant gloves such as butyl rubber, nitrile rubber, neoprene rubber, or viton.
Respirator: When handling in enclosed areas where exposure limits may be exceeded, use a respirator approved for pesticides.

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 the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Physical description: Light pink liquid.
Odor: Light ammonia like odor
Specific Gravity: 1.10 – 1.17 g/ml @ 20° C (9.20 – 9.75 lb/gal)*
pH: 8.5 – 9.0
Vapor pressure: Unknown
Vapor density: Unknown
Water solubility: Soluble

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

X. STABILITY AND REACTIVITY

Chemical stability: Stable, however may decompose if heated.
Conditions to avoid: Avoid temperatures above (105°F, 40°C) and below 40°F (6°C).
Incompatibility with other materials: Strong acids and oxidizing materials.
Hazardous decomposition products: May decompose to hydrogen chloride, oxides of nitrogen and phosgene when burning.
Hazardous polymerization: Product will not undergo polymerization.

XI. TOXICOLOGICAL INFORMATION

Acute toxicity:

Oral (rat)	LD ₅₀ > 1,500 mg/Kg
Dermal(rat)	LD ₅₀ > 2,000 mg/Kg
Inhalation(rat)	LC ₅₀ > 2.5 mg/L
Eye irritation (rabbit)	Corrosive
Skin irritation (rabbit)	Slight
Sensitization (guinea pig)	Potential sensitizer after repeated exposure to concentrate

Medical conditions aggravated by exposure: None known.

Carcinogen status:

OSHA	Not listed
NTP	Not listed
IARC	Not listed

Mutagenic data: Little evidence of mutagenic effects during *in vivo* or *in vitro* studies.

Additional data: Not known to exhibit reproductive or teratogenic (birth defect) effects.

XII. ECOLOGICAL INFORMATION

Environmental summary: 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.

Triclopyr 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.

Fish toxicity: (triclopyr amine)
96 hour LC₅₀, Rainbow trout – 240 ppm
96 hour LC₅₀, Bluegill – 450 ppm

Avian toxicity: (triclopyr amine)
Oral LD₅₀, Bobwhite quail – Unknown
Oral LD₅₀, Mallard duck – 2,000 mg/kg

Bee toxicity: (triclopyr acid) – Non-toxic

