



Creating Value Through Innovative Solutions

# Material Safety Data Sheet

## SINBAR® Herbicide

MSDS Number : 2535

DATE: (7/10/2009)

6 Pages

**Section 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION**

- 1.0 Product Name ..... **SINBAR® herbicide EPA # 61842-13**  
 Chemical Family ..... organic substituted uracil  
 Synonyms ..... Compound 732, Geonter  
 Formula .....  $C_9H_{13}ClN_2O_2$
- 1.2 **Manufacturer** ..... Tessenderlo Kerley Inc.  
 2255 N. 44<sup>th</sup> Street, Suite 300  
 Phoenix, Arizona 85008-3279  
 Information ..... (602) 889-8300
- 1.3 **Emergency Contact** ..... (866) 374-1975 (Tessenderlo Kerley)  
**(800) 424-9300 (CHEMTREC)**

**Section 2: COMPOSITION, INFORMATION ON INGREDIENTS**

- 2.1 **Chemical Ingredients (% by wt.)**
- |   |                  |     |
|---|------------------|-----|
| Terbacil (3-Tert-butyl-5-chloro-6-methyluracil) | CAS #: 5902-51-2 | 80% |
| Inert ingredients                               |                  | 20% |

(See Section 8 for exposure guidelines)

**Section 3: HAZARDS IDENTIFICATION**

**NFPA: Health - 1 Flammability - 1 Reactivity - 0**

**EMERGENCY OVERVIEW**

CAUTION! Harmful if swallowed. Wash thoroughly with soap and water after handling. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing.

**Section 3: HAZARDS IDENTIFICATION Cont.****3.1 POTENTIAL HEALTH EFFECTS** (if product not handled in the recommended manner)

**EYE:** Contact with the eyes may cause eye irritation with tearing, pain or blurred vision.

**SKIN CONTACT:** Contact with product may cause skin irritation with itching or swelling..

**SKIN ABSORPTION:** Absorption is unlikely to occur.

**INGESTION:** Based on the active ingredient, product ingestion may cause abnormal liver function with altered enzyme levels in the blood.

**INHALATION:** Inhalation of product may cause irritation of the upper respiratory passages with coughing and discomfort.

**CHRONIC EFFECTS/CARCINOGENICITY:** Not listed as a carcinogen by NTP, IARC or OSHA. See Section 11, Toxicological Information

**Section 4: FIRST AID MEASURES**

With any exposure contact the Poison Control Center for medical advise. Have product label with you when calling.

**4.1 EYES:** Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to insure thorough flushing of the entire area of the eye and lids. Obtain immediate medical attention.

**4.2 SKIN:** Immediately flush with large quantities of water for 15 minutes. Remove contaminated clothing under a safety shower. Do not neutralize with chemical agents. Obtain medical attention if irritation occurs.

**4.3 INGESTION:** DO NOT INDUCE VOMITING. Give 1 or 2 glasses of water. If vomiting does occur, repeat fluid administration. If unconscious or convulsing, do not give fluids. Obtain immediate medical attention.

**4.4 INHALATION:** Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has ceased, clear airway and start mouth to mouth resuscitation. If heart has stopped beating, external heart massage should be applied. Obtain immediate medical attention.

**Section 5: FIRE FIGHTING MEASURES****5.1 FLAMMABLE PROPERTIES**

**FLASH POINT:** NA                      **METHOD USED:** NA

**5.2 FLAMMABLE LIMITS**            In Air, LEL – 0.58 gm/L

**5.3 EXTINGUISHING MEDIA:** Use extinguishing media as appropriate for combustibles involved in fire.

**5.4 FIRE & EXPLOSIVE HAZARDS:** May be ignited by heat or open flame. Like most organic powders or crystals, under severe dusting conditions, this material may form explosive mixtures in air

<b>Section</b>	<b>5:</b>	<b>FIRE FIGHTING MEASURES, Cont.</b>
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**5.5 FIRE FIGHTING EQUIPMENT:** Wear self-contained breathing apparatus, pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

<b>Section</b>	<b>6:</b>	<b>ACCIDENTAL RELEASE MEASURES</b>
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**6.1 Small releases:** Clear area. Shut off leak if safely possible. Do not wash small spills away. Ensure adequate ventilation. Do not discharge into drains or surface waters/groundwater. Shovel material into a suitable container for disposal. If spill area is on ground near trees or other valuable plants, remove top two inches of soil after initial cleanup. Dispose as directed by the pesticide product label.

**6.2 Large releases:** Cordon off area of spillage and dike area with dirt, sand or other inert material to prevent any further migration. Recover as much of usable product for application (best disposal practice). Handle remaining material as a small spill above.

<b>Section</b>	<b>7:</b>	<b>HANDLING and STORAGE</b>
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**7.1 Handling:** Manufacturing, commercial blending, packaging and applicator personnel 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. Keep out of reach of children. Use only in a well ventilated area. Wash thoroughly after handling. Avoid prolonged or repeated contact with the skin and eyes. Avoid breathing vapors, mist or dust. Wash thoroughly with soap and water after handling. Wash exposed clothing before reuse.

Avoid dust generation. Keep away from heat, open flame, or ignition sources.

**7.2 Storage:** Store in cool, dry, well ventilated areas away from ignition sources, heat or flame. Protect containers from physical damage and contamination.

<b>Section</b>	<b>8:</b>	<b>EXPOSURE CONTROLS, PERSONAL PROTECTION</b>
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All personnel who handle this product in its end-use application should use this product only in accordance with its pesticide labeling and with the "Worker Protection Standard", 40 CFR 170. Wear long-sleeve work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with shower and eye wash.

**8.1 RESPIRATORY PROTECTION:** Use NIOSH approved respirators to avoid breathing product if ventilation is inadequate.

**8.2 SKIN PROTECTION:** Wear butyl, natural, nitrile or neoprene rubber gloves and coverall suit to prevent repeated or prolonged contact with the skin.

**8.3 EYE PROTECTION:** Chemical goggles and a full face shield to prevent contact with face and eyes.

<b>8.4 EXPOSURE GUIDELINES:</b>	OSHA	ACGIH
	<u>PEL</u>	<u>TLV STEL</u>
Terbacil	Not established	Not established

<b>Section</b>	<b>8:</b>	<b>EXPOSURE CONTROLS, PERSONAL PROTECTION, Cont.</b>
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**8.5 ENGINEERING CONTROLS:** Use adequate exhaust ventilation to prevent inhalation of product vapors, mist or dust..

<b>Section</b>	<b>9:</b>	<b>PHYSICAL and CHEMICAL PROPERTIES.</b>
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<b>9.1 APPEARANCE:</b>	off-white wettable powder
<b>9.2 ODOR:</b>	odorless
<b>9.3 BOILING POINT:</b>	NA
<b>9.4 VAPOR PRESSURE:</b>	NA
<b>9.5 VAPOR DENSITY:</b>	NA
<b>9.6 SOLUBILITY IN WATER:</b>	insoluble
<b>9.7 BULK DENSITY:</b>	loose – 21-24 lb/cu ft
<b>9.8 FREEZING POINT:</b>	NA
<b>9.9 pH:</b>	8.5 – 9.5 (2% in di-water @ 25°C or 77°F)
<b>9.10 VOLATILE:</b>	NA
<b>9.11 MELTING POINT</b>	Not determined

<b>Section</b>	<b>10:</b>	<b>STABILITY and REACTIVITY</b>
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**10.1 STABILITY:** This is a stable material under normal temperature and storage conditions.

**10.2 HAZARDOUS POLYMERIZATION:** Will not occur.

**10.3 HAZARDOUS DECOMPOSITION PRODUCTS:** Hazardous decomposition will not occur.

**10.4 INCOMPATIBILITY:** Avoid all sources of ignition, heat or open flame. Avoid prolonged exposure to excessive temperatures.

<b>Section</b>	<b>11:</b>	<b>TOXICOLOGICAL INFORMATION</b>
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Sinbar is a moderate skin irritant and a moderate eye irritant, but is not a skin sensitizer in animal tests.

**11.1 ORAL:** Oral-Rat LD<sub>50</sub>: >500 mg/kg (female); 2784 mg/kg (male) Slightly toxic by ingestion.

**11.2 DERMAL:** > 5,000 mg/kg (rabbits) Very low to slightly toxic

**11.3 INHALATION:** 5.3 mg/L (rats – 4 Hr) Very low toxicity.

**11.4 CHRONIC/CARCINOGENICITY:** Not listed as a carcinogen by NTP, IARC or OSHA.

**11.5 TERATOLOGY:** Data not available

**11.6 REPRODUCTION:** Data not available

**11.7 MUTAGENICITY:** Data not available

<b>Section</b>	<b>12:</b>	<b>ECOLOGICAL INFORMATION</b>
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To avoid impact on threatened or endangered aquatic plant or animal species, users must consult with state fish and game agency or U.S. Fire & Wildlife Service before making applications. Do not contaminate water when disposing of equipment wash waters.

Terbacil: Avian toxicity: LD<sub>50</sub> Bobwhite quail > 2,250 mg/kg LD<sub>50</sub> mallard duck > 5,000 ppm

Sinbar: Aquatic toxicity: LC<sub>50</sub> (96 hrs) Rainbow trout 54-79 ppm; Bluegill, sunfish 112 ppm

<b>Section</b>	<b>13:</b>	<b>DISPOSAL CONSIDERATIONS</b>
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Disposal of product waste should be handled by licensed waste handlers in accordance with all governmental regulations. This product is not regulated under RCRA.

Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of at an approved waste disposal facility.

Environmental Hazards: 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 cleaning equipment or disposing of equipment wash waters. Terbacil has properties that may result in surface water contamination via dissolved runoff and runoff erosion.

Container Disposal:

For paper and plastic bags: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of resulting smoke.

For Fiber drums with liners: Completely empty liner by shaking and taping sides and bottom to loosen clinging particles. Empty residue into manufacturing equipment. Then dispose of liner in sanitary landfill or by incineration if allowed by state or local authorities. If drum is contaminated and cannot be used, dispose of in the same manner.

<b>Section</b>	<b>14:</b>	<b>TRANSPORT INFORMATION</b>
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**14.1 DOT Shipping Name:** Not regulated

**14.2 DOT Hazard Class:**

**14.3 UN/NA Number:**

**14.4 Packing Group:**

**14.5 DOT Placard:**

**14.6 DOT Label**

**14.7 IMO Shipping Name:** NA

<b>Section</b>	<b>14:</b>	<b>TRANSPORT INFORMATION, Cont.</b>
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**14.8 Reportable Quantity (RQ):** NA

<b>Section</b>	<b>15:</b>	<b>REGULATORY INFORMATION</b>
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**15.1 OSHA:** This product is listed as a hazardous chemical under criteria of the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**15.2 SARA TITLE III:**

a.	<b>EHS</b> (Extremely Hazardous Substance) List:	No
b.	Section 311/312, (Tier I,II) Categories:	Immediate (acute) Yes
	Fire	No
	Sudden release	No
	Reactivity	No
	Delayed (chronic)	No
c.	Section 313 (Toxic Release Reporting-Form R): (Terbacil, 80% of product)	Yes
d.	<b>TPQ</b> (Threshold Planning Quantity):	No

**15.3 CERCLA/SUPERFUND:** RQ (Reportable Quantity) No

**15.4 TSCA** (Toxic Substance Control Act) Inventory List: No

**15.5 RCRA** (Resource Conservation and Recovery Act) Status: No

**15.6 WHMIS** (Canada) Hazard Classification: ND

**15.7 DOT** Hazardous Material: (See Section 14) No

**15.8 CAA** Hazardous Air Pollutant (HAP) No

**15.9 FIFRA** Registered pesticide Yes  
EPA REG #61842-13

**15.10 Prop 65 (CA)** Yes

<b>Section</b>	<b>16:</b>	<b>OTHER INFORMATION</b>
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**REVISIONS:** The entire MSDS was reformatted to comply to ANSI Standard Z400.1-1993, by Technical Services-Tessengerlo Kerley, Inc.

Revised Section 1.3, Emergency Contact, 7/10/2009

<p>THE INFORMATION PUBLISHED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN COMPILED FROM OUR EXPERIENCE AND OSHA, ANSI, NFPA, DOT, ERG, AND CHRIS. IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SUITABILITY OF THIS INFORMATION FOR THE ADOPTION OF NECESSARY SAFETY PRECAUTIONS. WE RESERVE THE RIGHT TO REVISE MATERIAL SAFETY DATA SHEETS PERIODICALLY AS NEW INFORMATION BECOMES AVAILABLE.</p>
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