



DuPont
Material Safety Data Sheet

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M0000051 "Sinbar" Herbicide
Revised 13-SEP-1996 Printed 3-OCT-1996

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

"Sinbar" is a registered trademark of DuPont.

Corporate MSDS Number : DU003088
Grade : AN 80% FORMULATION

Company Identification

MANUFACTURER/DISTRIBUTOR
DuPont
1007 Market Street
Wilmington, DE 19898

PHONE NUMBERS

Product Information : 1-800-441-7515
Transport Emergency : CHEMTREC 1-800-424-9300
Medical Emergency : 1-800-441-3637

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
*TERBACIL (3-TERT-BUTYL-5-CHLORO-6-METHYLURACIL)	5902-51-2	80
INERT INGREDIENTS		20

* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

HAZARDS IDENTIFICATION

Potential Health Effects

CAUTION! May irritate eyes, nose, throat and skin.

ANIMAL DATA

ORAL-(rats) LD50 is greater than 5,000 mg/kg but less than 7,500 mg/kg for both males and females. Very low toxicity by ingestion.

Dermal: 80% wettable powder (male rabbit) ALD is greater than 5,000 mg/kg. Repeated applications of 5,000 mg/kg (80% wettable powder) to abraded rabbit skin once a day, 5 days a

(HAZARDS IDENTIFICATION - Continued)

week for 3 weeks, produced no adverse clinical or pathological effects.

Skin Irritation and Sensitization: Technical terbacil produced neither irritation nor sensitization when applied as a 15% solution to intact and abraded guinea pig skin.

Eye: Administration of the dry technical to rabbit eyes produced mild conjunctival irritation which was reversible within 4 hours. No corneal or iritic effects were noted. A 10% propylene glycol suspension produced iritis and mild conjunctivitis which was reversible within 48 hours. No corneal injury was noted.

Inhalation: The 4-hour LC50 for technical terbacil in male and female rats, head-only exposure, is greater than 4.4 mg/L.

CHRONIC STUDIES: (Terbacil)

Oral (rat): In a 2-year feeding study, the no-observable-effect level was 50 ppm. Hepatocellular hypertrophy was transitory at 250 ppm and persistent at the highest dose which was escalated stepwise from 2,500 to 10,000 ppm during the study. Decreased body weight was also noted at 2,500-10,000 ppm. No evidence of compound-related oncogenicity was observed.

Oral (mouse): In a 2-year feeding study, the no-observable-effect level was 50 ppm. Hepatocellular hypertrophy was noted in males at 1,250 ppm and in both sexes at the highest dose which was increased from 5,000 to 7,500 ppm at week 54. An increased incidence of hyperplastic liver nodules was also noted in males at 5,000-7,500 ppm. No compound-related oncogenic effects were observed.

Oral (dog): In a 2-year feeding study, the no-observable-effect level was 250 ppm; a slight increase in relative liver weight was noted at the highest dose which was escalated stepwise from 2,500 to 10,000 ppm during the study.

Reproduction (rat): No adverse effect on reproduction or lactation performance was observed during a 3-generation, 6-litter study at 0, 50, and 250 ppm. No abnormal histopathology was noted on examination of the F3B litters at weaning.

Teratogenicity (rat): In a dietary study at 0, 250, 1,250, and 5,000 ppm, terbacil was not teratogenic at any dose tested but produced embryotoxic effects at 1,250 and 5,000 ppm.

Mutagenicity: Not mutagenic in the Chinese Hamster ovary

(HAZARDS IDENTIFICATION - Continued)

cell point mutation assay.

HUMAN HEALTH EFFECTS BY OVEREXPOSURE:

Overexposure to terbacil by eye contact may initially include eye irritation with discomfort, tearing, or blurring of vision.

Based on data from tests in animals, ingestion of high doses may include abnormal liver function as detected by laboratory tests.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid

INHALATION

No specific intervention is indicated as the compound is not likely to be hazardous by inhalation. Consult a physician if necessary.

SKIN CONTACT

Flush skin with water after contact. Wash contaminated clothing before reuse.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION

No specific intervention is indicated as compound is not likely to be hazardous by ingestion. Consult a physician if necessary.

FIRE FIGHTING MEASURES

Flammable Properties

Flammable limits in Air, % by Volume
LEL : 0.058 g/L

May be ignited by heat or open flame.

(FIRE FIGHTING MEASURES - Continued)

Like most organic powders or crystals, under severe dusting conditions, this material may form explosive mixtures in air.

Extinguishing Media

Water Spray, Foam, Dry Chemical, CO2.

Fire Fighting Instructions

Wear self-contained breathing apparatus. Use water spray. Runoff from fire control may be a pollution hazard.

If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the contamination hazard.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Initial Containment

Dike spill. Prevent material from entering sewers, waterways, or low areas.

Spill Clean Up

Shovel or sweep up.

Accidental Release Measures

If spill area is on ground near trees or other valuable plants, remove top 2 inches of soil after initial cleanup.

HANDLING AND STORAGE

Handling (Personnel)

Avoid breathing vapors or mist. Avoid breathing dust. Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

USERS SHOULD: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

(HANDLING AND STORAGE - Continued)

Handling (Physical Aspects)

Avoid dust generation. Keep away from heat, sparks and flames.

Storage

Store in a well ventilated place. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use only with adequate ventilation.

Personal Protective Equipment

Always follow label instructions when using this product.

Applicators and other handlers must wear:

Long-sleeved shirt and long pants
Waterproof gloves
Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls
Waterproof gloves
Shoes plus socks

Exposure Guidelines

Applicable Exposure Limits

TERBACIL

PEL (OSHA)	:	None Established
TLV (ACGIH)	:	None Established
AEL * (DuPont)	:	5 mg/m ³ , 8 & 12 Hr. TWA, total dust

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

pH : 8.5-9.5 - 2% in d-water @ 25 deg C (77 deg F)
Odor : Odorless
Form : Wettable powder
Color : Off-white
Bulk Density (Loose) : 21-24 lb/cu ft

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials

None reasonably foreseeable.

Decomposition

Decomposition will not occur.

Polymerization

Polymerization will not occur.

ECOLOGICAL INFORMATION

Ecotoxicological Information

Aquatic Toxicity

The active ingredient, terbacil, is moderately toxic.
96 hour LC50, Rainbow Trout: 46.2 mg/L

DISPOSAL CONSIDERATIONS

Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system.

TRANSPORTATION INFORMATION

Shipping Information

DOT/IMO
Proper Shipping Name : NOT REGULATED

REGULATORY INFORMATION

U.S. Federal Regulations

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute : Yes
Chronic : No
Fire : No
Reactivity : No
Pressure : No

OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating
Health : 1
Flammability : 1
Reactivity : 0

NPCA-HMIS Rating
Health : 1
Flammability : 1
Reactivity : 0

Personal Protection rating to be supplied by user depending on use conditions.

Additional Information

This product is registered and controlled under EPA/FIFRA.

EPA Reg. No. 352-317

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS : DuPont
Address : Agricultural Products
Wilmington, DE 19898
Telephone : 800-441-7515

(Continued)

Indicates updated section.

End of MSDS