



The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

DuPont
Material Safety Data Sheet

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"DuPont" "STOUT" (mp) HERBICIDE
M0000638 Revised 8-NOV-2005

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

"DuPont", "STOUT" are trademarks of DuPont.

Tradenames and Synonyms

NICOSULFURON
THIFENSULFURON METHYL

Company Identification

MANUFACTURER/DISTRIBUTOR
DuPont
1007 Market Street
Wilmington, DE 19898

PHONE NUMBERS

Product Information : 1-800-441-7515 (outside the U.S.
302-774-1000)
Transport Emergency : CHEMTREC 1-800-424-9300(outside U.S.
703-527-3887)
Medical Emergency : 1-800-441-3637 (outside the U.S.
302-774-1000)

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
NICOSULFURON (2-[[[4,6-dimethoxypyrimidin-2-yl] aminocarbonyl]aminosulfonyl]- N,N-dimethyl-3- pyridinecarboxamide	111991-09-4	67.5
THIFENSULFURON METHYL Methyl 3-[[[[4-methoxy-6-methyl-1,3,5- triazin-2-yl)amino]carbonyl]amino]sulfonyl]-2- thiophenecarboxylate	79277-27-3	5
INERT INGREDIENTS		27.5

HAZARDS IDENTIFICATION

Emergency Overview

CAUTION! Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing.

Potential Health Effects

Based on animal data, eye contact with Nicosulfuron may cause eye irritation with discomfort, tearing, or blurring of vision.

Based on animal data, inhalation of the active ingredient, Thifensulfuron Methyl, may cause irritation of the upper respiratory passages, with coughing and discomfort.

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

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

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-441-3637 for emergency medical treatment information.

FIRE FIGHTING MEASURES

Flammable Properties

Not a fire or explosion hazard.

Extinguishing Media

Water, Foam, Dry Chemical, CO2.

Fire Fighting Instructions

Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Runoff from fire control may be a pollution hazard.

If area is exposed to fire and conditions permit, let fire burn itself out. Burning chemicals may produce by-products more toxic than the original material. If product is on fire, wear self-contained breathing apparatus and full protective equipment. Use water spray. Control runoff.

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.

Emergency Response - Chemical resistant coveralls, waterproof gloves, waterproof boots and face/eye protection. If dusting occurs, use NIOSH approved respirator protection.

Initial Containment

Follow applicable Federal, State/Provincial and Local laws/regulations.

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

Spill Clean Up

Shovel or sweep up.

HANDLING AND STORAGE

Handling (Personnel)

USERS SHOULD: 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.

Storage

Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a cool, dry place.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

When applicators use enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified for "Applicators and Other Handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

Personal Protective Equipment

Some materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for Category A on the EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

Long-sleeved shirt and long pants.

Chemical-resistant gloves Category A (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber), all equal to or greater than 14 mils.

Shoes plus socks.

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.

(EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued)

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.

Chemical-resistant gloves Category A (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber), all equal to or greater than 14 mils.

Shoes plus socks.

Exposure Guidelines

Applicable Exposure Limits

NICOSULFURON

PEL (OSHA) : None Established
TLV (ACGIH) : None Established
AEL * (DuPont) : 5 mg/m³, 8 & 12 Hr. TWA, respirable dust
dust

THIFENSULFURON METHYL

PEL (OSHA) : None Established
TLV (ACGIH) : None Established
AEL * (DuPont) : 5 mg/m³, 8 & 12 Hr. TWA

* 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

Solubility in Water : Dispersible
Odor : None
Form : Solid, Granules

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials

None reasonably foreseeable.

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

Nicosulfuron component

Oral LD50:	> 5,000 mg/kg in rats (Very low toxicity)
Skin absorption LD50:	> 2,000 mg/kg in rabbits (Slightly to Moderately toxic)
Inhalation 4 hour LC50:	5.6 mg/L in rats (Very low toxicity)

Nicosulfuron is not a skin irritant or a skin sensitizer in animals, but is a moderate eye irritant.

Single high inhalation exposures in animals with Nicosulfuron caused nonspecific effects such as slight to severe weight losses.

There were no effects observed when single doses of Nicosulfuron were applied to the skin of rabbits.

No clinical signs of toxicity, and no deaths were seen in animals administered single oral doses of up to 11,000 mg/kg of Nicosulfuron. There were no toxicologically significant changes during these 90-day tests in rats, mice and dogs. In a one-year feeding study in dogs, Nicosulfuron caused decreased body weight and increased liver weights in male dogs.

Other laboratory animal tests indicate that Nicosulfuron is neither a carcinogen nor a reproductive or developmental toxin. Nicosulfuron has not produced genetic damage in bacterial or mammalian cell cultures or in animals.

Thifensulfuron Methyl component

Oral LD50:	> 5,000 mg/kg in female rats
Skin absorption LD50:	> 5,000 mg/kg in rats
Inhalation 4 hour LC50:	> 7.9 mg/L in rats (Thifensulfuron Methyl technical)

The Thifensulfuron Methyl component of this product is not a skin irritant or eye irritant, and is not a skin sensitizer in animals.

The effects in animals from short inhalation exposure to Thifensulfuron Methyl include non-specific effects such as weight loss, and irritation when compared to the control group.

Repeated ingestion exposures to Thifensulfuron Methyl caused decreased body and organ weights, and some blood chemistry changes, including increased blood urea nitrogen and decreased protein and globulins. Long-term exposures caused an increase in liver and gall bladder weights, decreased

(TOXICOLOGICAL INFORMATION - Continued)

body weight gain, and a decreased level of sodium in the blood when compared to the control group.

No carcinogenic effects were observed in animal tests with Thifensulfuron Methyl. Animal data show developmental effects only at exposure levels producing toxic effects in the adult animal. Tests in animals demonstrate no reproductive toxicity. Thifensulfuron Methyl does not produce genetic damage in bacterial or mammalian cell cultures or animals.

ECOLOGICAL INFORMATION

Ecotoxicological Information

NICOSULFURON TECHNICAL

AQUATIC TOXICITY:

- 96 hour LC50 - Bluegill sunfish: > 1000 mg/L.
- 96 hour LC50 - Rainbow trout: > 1000 mg/L.
- 48 hour EC50 - Daphnia magna: > 1000 mg/L.

AVIAN TOXICITY:

- Acute Oral LD50 - Bobwhite Quail: > 2250 mg/kg.
- Acute Dietary LC50 - Bobwhite Quail: > 5620 ppm.
- Acute Dietary LC50 - Mallard Duck: > 5620 ppm.

THIFENSULFURON METHYL TECHNICAL

AQUATIC TOXICITY:

- 96 hour LC50 - Rainbow trout: > 100 mg/L.
- 96 hour LC50 - Bluegill sunfish: > 100 mg/L.

AVIAN TOXICITY:

- Acute Oral LD50 - Mallard Duck: > 2510 mg/kg.
- Acute Dietary LC50 - Mallard Duck: > 5620 mg/kg.
- Acute Dietary LC50 - Bobwhite Quail: > 5620 mg/kg.

DISPOSAL CONSIDERATIONS

Waste Disposal

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

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, 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 rinsewater. Do not apply where/when conditions could favor runoff.

(DISPOSAL CONSIDERATIONS - Continued)

Container Disposal

For Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

For Fiber Sacks: Completely empty fiber sack by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into manufacturing or application equipment. Then dispose of sack in a sanitary landfill or by incineration if allowed by State and local authorities.

For Fiber Drums with Liners: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

For Bags Containing Water-Soluble Packets: Do not reuse the outer box or the resealable plastic bag. When all water-soluble packets are used, the outer packaging should be clean and may be disposed of in a sanitary landfill or by incineration, or if allowed by State and local authorities, by open burning. If burned, stay out of smoke. If the resealable plastic bag contacts the formulated product in any way, the bag must be triple-rinsed with clean water. Add the rinsate to the spray tank and dispose of the outer wrap as described above.

For Metal Containers (non aerosol): Triple rinse (or equivalent) the container. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

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

In the United States this product is regulated by the US Environmental Protection Agency under the Federal Insecticide, Fungicide and Rodenticide Act. It is a violation of federal law to use this product in a manner inconsistent with its labeling.

EPA Reg. No. 352-667

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.

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 Crop Protection
Address : Wilmington, DE 19898
Telephone : 1-888-638-7668

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS