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DuPont "MUSTER" HERBICIDE  
GPA00008 Revised 11-AUG-2008 Printed 26-AUG-2008  
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CHEMICAL PRODUCT/COMPANY IDENTIFICATION  
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Material Identification

"MUSTER" is a registered trademark of DuPont.

Corporate MSDS Number : DU005737

Product Use

Herbicide

# Tradenames and Synonyms

MUSTER "TOSS-N-GO"  
ETHAMETSULFURON METHYL

Company Identification

MANUFACTURER/DISTRIBUTOR  
E.I. du Pont Canada Company  
P.O. Box 2200  
Streetsville  
Mississauga, Ontario L5M 2H3

PHONE NUMBERS

Product Information : 1-800-387-2122  
Medical Emergency : 1-800-441-3637 (24 hours)

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COMPOSITION/INFORMATION ON INGREDIENTS  
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Components

Material	CAS Number	%
Ethametsulfuron-methyl (methyl-2-[[[[[4-ethoxy-6-(methylamino)-1,3, 5-triazin-2-yl]-amino]carbonyl]amino] sulfonyl]benzoate)	97780-06-8	75 %
Inert Ingredients		25 %

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HAZARDS IDENTIFICATION  
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Emergency Overview

CAUTION!

Harmful if absorbed through skin. Avoid  
contact with eyes, skin or clothing. Prolonged  
or frequently repeated skin contact may cause

## (HAZARDS IDENTIFICATION - Continued)

an allergic reaction in some individuals.

## Potential Health Effects

HUMAN HEALTH EFFECTS OF OVEREXPOSURE TO ETHAMETSULFURON  
METHYL:

Overexposure to ethametsulfuron methyl by eye contact may include discomfort, tearing, or blurring of vision.

Results from animal tests suggest that inhalation of high concentration or ingestion of high doses may lead to abnormal kidney 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.

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FIRST AID MEASURES  
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## 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/CLOTHING CONTACT

If on skin or clothing. Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. Get medical attention if irritation persists by calling a poison center or doctor for treatment advice.

## EYE CONTACT:

In case of contact, immediately flush eyes with plenty of water for 15-20 minutes. Call a physician if irritation persists.

## INGESTION:

No specific intervention is indicated as compound is not likely to be hazardous by ingestion. Consult a physician if necessary. Have the product container or label with you when calling a poison center or doctor, or going for treatment. You may also contact 1-800-441-3637 for medical emergencies involving this product.

## (FIRST AID MEASURES - Continued)

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FIRE FIGHTING MEASURES  
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## Flammable Properties

Autodecomposition : 460 C (860 F)

Not a fire or explosion hazard.

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

## Extinguishing Media

Water Spray, Dry Chemical, CO2.

## Fire Fighting Instructions

Wear self-contained breathing apparatus. Wear full protective equipment. 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.

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ACCIDENTAL RELEASE MEASURES  
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## 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.

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HANDLING AND STORAGE  
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## Handling (Personnel)

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

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

## Storage

Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

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EXPOSURE CONTROLS/PERSONAL PROTECTION  
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## Engineering Controls

Use only with adequate ventilation.

## 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 an EPA chemical resistance category selection chart.

## WORKERS PROTECTION STANDARDS(WPS) USES:

Applicators and other handlers who handle this pesticide for any use covered by the Workers Protection Standard [(40 CFR Part 170)] must wear:

Long-sleeved shirt and long pants.

Chemical Resistant Gloves Category A (such as, butyl rubber, natural rubber, neoprene rubber or nitrile rubber) greater or equal to 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)

## Exposure Guidelines

## Applicable Exposure Limits

## Ethametsulfuron-methyl

PEL (OSHA)	: None Established
TLV (ACGIH)	: None Established
AEL * (DuPont)	: 5 mg/m <sup>3</sup> , 8 & 12 Hr. TWA, respirable dust 10 mg/m <sup>3</sup> , 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.

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PHYSICAL AND CHEMICAL PROPERTIES  
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## Physical Data

pH	: (1% wt/wt in water) 6.4-7.2
Odor	: None
Form	: Solid, granular
Color	: Light tan
Bulk Density (Loose)	: 35 lb/cu ft
Bulk Density (Packed)	: 39 lb/cu ft

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STABILITY AND REACTIVITY  
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## Chemical Stability

Stable at normal temperatures and storage conditions.

## Incompatibility with Other Materials

None reasonably foreseeable.

## Polymerization

Polymerization will not occur.

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TOXICOLOGICAL INFORMATION  
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## Animal Data

## ANIMAL DATA:

Acute Oral LD50 (Rat): >5,000 mg/kg.  
Low toxicity by ingestion.

Acute Dermal LD50 (Rabbit): >2,000 mg/kg.  
Moderate to low toxicity by skin contact.

Eye Irritation: Not an eye irritant.

## (TOXICOLOGICAL INFORMATION - Continued)

Skin Irritation and Sensitization: Not a primary irritant in rabbits. Non-irritant and non-sensitizer in the guinea pig.

## CHRONIC AND SUBCHRONIC TOXICITY:

This product was non-oncogenic upon long-term dietary administration to laboratory animals. Dogs fed for one year with a 15,000 ppm diet had reduced body weights, slightly reduced red blood cell mass and serum sodium concentrations. There were no macroscopic or microscopic lesions associated with these effects. The NOEL for dogs was 3,000 ppm.

Dietary administration to rats also produced a transient lowering of serum sodium at the high dose, 5,000 ppm. As with the dog this effect was mild and did not progress over time. Subchronic (90-day) dietary administration to rats and mice resulted in elevated mean kidney to body weight ratios at the high dose, 5,000 ppm. This slight effect was not observed following longer exposures and occurred in the absence of macroscopic or microscopic pathological indices or clinical indices of kidney damage. The NOELs for mice and rats following chronic dietary exposures were 5,000 ppm and 500 ppm, respectively.

## TERATOGENICITY:

Product was non-teratogenic in the rat and rabbit. Excessive doses administered via gavage were toxic to the dams and offspring. For both species the offspring was either equal or less sensitive than the mothers to this compound. The NOEL for fetal toxicity was 1,000 mg/kg body weight.

## REPRODUCTIVE EFFECT:

There were no effects on fertility or on offspring health during a 2-generation reproduction study in rats at 20,000 ppm dietary administration. The NOEL was 5,000 ppm due to lower parental body weights.

## MUTAGENICITY:

Negative in 5 of 5 assays that measure in vitro and in vivo mutagenic or genotoxic effects.

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ECOLOGICAL INFORMATION  
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## Ecotoxicological Information

## Aquatic Toxicity

The active ingredient, ethametsulfuron methyl has low toxicity.

96 hour LC50, Rainbow Trout > 600 mg/L.

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DISPOSAL CONSIDERATIONS  
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## Waste Disposal

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

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

## Container Disposal

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

## 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 Drums With Liners:

Completely empty liners 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.

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TRANSPORTATION INFORMATION  
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## Shipping Information

DOT  
Proper Shipping Name : NOT REGULATED BY D.O.T.

DOT/IMO  
Proper Shipping Name : NOT REGULATED

## Shipping Information -- Canada

This material is Not Regulated.

Please contact DuPont Canada Inc. for details.

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REGULATORY INFORMATION  
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## 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. 352-558

## Canadian Regulations

Regulated under the Pest Control Products Act--WHMIS Exempt

Registration No. 23569 Pest Control Products Act

Registration No. TOSS-N-GO 23569 Pest Control Products Act

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OTHER INFORMATION  
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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

----- Crop Protection E.I. du Pont Canada Company

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DuPont  
Material Safety Data Sheet

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(Continued)

Box 2200, Streetsville  
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# Indicates updated section.

End of MSDS