

**DuPont™ Pastora® Herbicide**

Version 2.4

Revision Date 04/16/2010

Ref. 130000043462

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : DuPont™ Pastora® Herbicide
Tradename/Synonym : DPX-Q2A31 71.25WG Blend
B12748177
NICOSULFURON (2-[[[(4,6-dimethoxypyrimidin-2-yl)aminocarbonyl]aminosulfonyl]-N,N-dimethyl-3-pyridinecarboxamide)
METSULFURON METHYL (Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2yl)amino]carbonyl]amino]sulfonyl]benzoate)

MSDS Number : 130000043462

Manufacturer : DuPont
1007 Market Street
Wilmington, DE 19898

Product Information : 1-800-441-7515 (outside the U.S. 1-302-774-1000)
Medical Emergency : 1-800-441-3637 (outside the U.S. 1-302-774-1139)
Transport Emergency : CHEMTREC: 1-800-424-9300 (outside the U.S. 1-703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

CAUTION!

Causes eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes and clothing. Avoid breathing dust or spray mist.

Potential Health Effects

This section includes potential acute adverse effects which could occur if this material is not used according to the label.

Skin : May cause: Irritation with discomfort or rash.

Eyes : May cause: Irritation with discomfort, pain, redness, or visual impairment.

Carcinogenicity

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

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Nicosulfuron	111991-09-4	56.2 %
Metsulfuron methyl	74223-64-6	15 %
Inert Ingredients		28.8 %

SECTION 4. FIRST AID MEASURES

- Skin contact : Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- Eye contact : 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.
- Inhalation : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.
- Ingestion : Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person.
- General advice : Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
For medical emergencies involving this product, call toll free 1-800-441-3637. See Label for Additional Precautions and Directions for Use.

SECTION 5. FIRE-FIGHTING MEASURES

- Fire and Explosion Hazard : Not a fire or explosion hazard.

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- Suitable extinguishing media : Water spray, Foam, Dry chemical, Carbon dioxide (CO2)
- Firefighting Instructions : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.
Evacuate personnel and keep upwind of fire. If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers / tanks with water spray. Runoff from fire control may be a pollution hazard. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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

- Safeguards (Personnel) : Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus. Wear personal protective equipment.
- Spill Cleanup : Sweep up and shovel into suitable containers for disposal.
- Accidental Release Measures : Prevent material from entering sewers, waterways, or low areas. Follow applicable Federal, State/Provincial and Local laws/regulations.

SECTION 7. HANDLING AND STORAGE

- Handling (Personnel) : Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing.
- Storage : Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in original container. Store in a cool, dry place. Keep out of the reach of children.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls : When handlers use closed systems, enclosed cabs, or aircraft 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.



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Personal protective equipment

Skin and body protection : 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 greater than or equal to 14 mils
 Shoes plus socks
 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 greater than or equal to 14 mils
 Shoes plus socks

Protective measures : Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Use this product in accordance with its label.

**Exposure Guidelines
 Exposure Limit Values**

Nicosulfuron
 AEL * (DUPONT) 5 mg/m3 8 & 12 hr. TWA Respirable dust.

Metsulfuron methyl
 AEL * (DUPONT) 10 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : solid
 Color : light brown, tan
 Odor : slight
 pH : 4.3 - 5.3
 Density : 0.54 - 0.66 g/ml

SECTION 10. STABILITY AND REACTIVITY

Stability : Stable at normal temperatures and storage conditions.
Incompatibility : None reasonably foreseeable.


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SECTION 11. TOXICOLOGICAL INFORMATION
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Inhalation 4 h LC50 : > 5.6 mg/l , rat

Dermal LD50 : > 2,000 mg/kg , rabbit

Oral LD50 : > 5,000 mg/kg , rat

Skin irritation : slight irritation, rabbit

Eye irritation : Moderate eye irritation, rabbit

Sensitisation : Animal test did not cause sensitization by skin contact., guinea pig

Further information : Information given is based on data on the components and the toxicology of similar products.

Nicosulfuron

Carcinogenicity : Animal testing did not show any carcinogenic effects.

 Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Did not cause genetic damage in animals.

Reproductive toxicity : Animal testing showed no reproductive toxicity.

Teratogenicity : Did not show teratogenic effects in animal experiments.

Metsulfuron methyl

Repeated dose toxicity : The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

 Oral
rat
Reduced body weight gain, Organ weight changes, Liver

 Dermal
rabbit
Skin irritation

Carcinogenicity : Did not show carcinogenic effects in animal experiments.


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Mutagenicity	:	Did not show mutagenic effects in animal experiments. Did not cause genetic damage in cultured bacterial cells. Genetic damage in cultured mammalian cells was observed in some laboratory tests but not in others.
Reproductive toxicity	:	Animal testing did not show any effects on fertility.
Teratogenicity	:	Animal testing showed no developmental toxicity.

SECTION 12. ECOLOGICAL INFORMATION
Aquatic Toxicity
Nicosulfuron

96 h LC50	:	Oncorhynchus mykiss (rainbow trout) > 1,000 mg/l
96 h LC50	:	Lepomis macrochirus (Bluegill sunfish) > 1,000 mg/l
48 h EC50	:	Daphnia magna (Water flea) > 1,000 mg/l
90 d	:	NOEC Oncorhynchus mykiss (rainbow trout) 24 mg/l
21 d	:	NOEC Daphnia magna (Water flea) 43 mg/l

Metsulfuron methyl

96 h LC50	:	Oncorhynchus mykiss (rainbow trout) > 150 mg/l
96 h LC50	:	Lepomis macrochirus (Bluegill sunfish) > 150 mg/l
72 h ErC50	:	Pseudokirchneriella subcapitata (green algae) 0.857 mg/l

Toxicity to other organisms
Nicosulfuron

LD50	:	Colinus virginianus (Bobwhite quail) > 2,250 mg/kg Oral
LC50	:	Colinus virginianus (Bobwhite quail) > 5,620 mg/kg Dietary
LC50	:	Anas platyrhynchos (Mallard duck) > 5,620 mg/kg Dietary

Metsulfuron methyl

LD50	:	Anas platyrhynchos (Mallard duck) > 2,510 mg/kg
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LC50 : Colinus virginianus (Bobwhite quail) > 5,620 mg/kg

Additional ecological information : 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 washwaters or rinsate. Do not apply where/when conditions favour runoff.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal : Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.

Container Disposal : Container Refilling and Disposal:
Refer to the product label for instructions.
The container must only be refilled with this pesticide product.
DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE.
Do not transport if this container is damaged or leaking.

In the event of a major spill, fire or other emergency, call 1-800-441-3637 day or night.

SECTION 14. TRANSPORT INFORMATION

IATA_C	UN-Number	: 3077
	Proper shipping name	: Environmentally hazardous substance, solid, n.o.s. (Nicosulfuron)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9MI
IMDG	UN-Number	: 3077
	Proper shipping name	: Environmentally hazardous substance, solid, n.o.s. (Nicosulfuron)
	Class	: 9
	Packing group	: III

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Labelling No. : 9
Marine pollutant : yes (Nicosulfuron)

Not regulated as a hazardous material by DOT.

SECTION 15. REGULATORY INFORMATION

SARA 313 Regulated Chemical(s) : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

EPA Reg. No. : 352-819
In the United States this product is regulated by the US Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

California Prop. 65 : Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known

SECTION 16. OTHER INFORMATION

DuPont™, Pastora® are trademarks of E. I. du Pont de Nemours and Company

Contact person : DuPont Crop Protection, Wilmington, DE, 19898, Phone: 1-888-638-7668

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