

**DuPont™ Realm™ Q Herbicide**

Version 2.1

Revision Date 02/14/2011

Ref. 130000094276

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™ Realm™ Q Herbicide
Tradename/Synonym : DPX-Q9W38
DPX-Q9W38 WG Blend
Rimsulfuron: N-((4,6-dimethoxypyrimidin-2-yl)aminocarbonyl)-3-(ethylsulfonyl)-2-pyridinesulfonamide

MSDS Number : 130000094276

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 moderate eye irritation. Do not get in eyes or on clothing.

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.

Target Organs
Mesotrione

: Eyes

Carcinogenicity

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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.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Rimsulfuron	122931-48-0	7.5 %
Mesotrione	104206-82-8	31.25 %
Isoxadifen-ethyl	163520-33-0	3.75 %
Other Ingredients		57.5 %

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 : Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.



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- 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. Do not 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

- Suitable extinguishing media : Water spray, Foam, Dry chemical, Carbon dioxide (CO2)
- Unsuitable extinguishing media : High volume water jet, (contamination risk)
- Firefighting Instructions : Wear full protective clothing and self-contained breathing apparatus. (on small fires) 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.

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. Use 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. Never return spills in original containers for re-use. Dispose of in accordance with local regulations.



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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. Wash contaminated clothing before re-use.
- Handling (Physical Aspects) : Keep away from heat and sources of ignition.
- 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 : Use only with adequate ventilation.
- 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.

Exposure Guidelines
Exposure Limit Values

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

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* 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, granular
Color	: brown
Odor	: none
pH	: 4.0 - 5.0
Bulk density	: 0.49 - 0.59 g/ml

SECTION 10. STABILITY AND REACTIVITY

Stability	: Stable at normal temperatures and storage conditions.
Conditions to avoid	: None reasonably foreseeable.
Incompatibility	: No materials to be especially mentioned.

SECTION 11. TOXICOLOGICAL INFORMATION

DuPont™ Realm™ Q Herbicide	
Inhalation 4 h LC50	: > 2.0 mg/l , rat
Dermal LD50	: > 5,000 mg/kg , rat
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



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	Further information	:	Information given is based on data on the components and the toxicology of similar products.
Rimsulfuron	Repeated dose toxicity	:	The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions. Oral rat altered blood chemistry, Liver effects, Organ weight changes
	Carcinogenicity	:	Did not show carcinogenic effects in animal experiments.
	Mutagenicity	:	Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Did not show mutagenic effects in animal experiments.
	Reproductive toxicity	:	Animal testing did not show any effects on fertility.
	Teratogenicity	:	Evidence suggests the substance is not a developmental toxin in animals.
Mesotrione	Repeated dose toxicity	:	animals (unspecified species) Reduced body weight gain, Increased liver weight, Increased kidney weight, altered hematology, eye effects, Cataracts, No effect to neurotoxicity.
	Carcinogenicity	:	Did not show carcinogenic effects in animal experiments.
	Mutagenicity	:	Did not show mutagenic effects in animal experiments.
	Reproductive toxicity	:	Animal testing showed no reproductive toxicity.
	Teratogenicity	:	Animal testing showed no developmental toxicity.
Isoxadifen-ethyl	Carcinogenicity	:	Animal testing did not show any carcinogenic effects.
	Mutagenicity	:	Tests on bacterial or mammalian cell cultures did not show mutagenic effects.


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Teratogenicity : Animal testing showed no developmental toxicity.

SECTION 12. ECOLOGICAL INFORMATION
Aquatic Toxicity
Rimsulfuron

96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 390 mg/l
 96 h LC50 : Lepomis macrochirus (Bluegill sunfish) > 390 mg/l
 72 h EC50 : Scenedesmus capricornutum (fresh water algae) 1.6 mg/l
 48 h EC50 : Daphnia magna (Water flea) > 360 mg/l
 90 d : NOEC Oncorhynchus mykiss (rainbow trout) 110 mg/l
 21 d : NOEC Daphnia magna (Water flea) 0.82 mg/l

Mesotrione

96 h LC50 : Oncorhynchus mykiss (rainbow trout) >114 ppm
 5 d EC50 : Pseudokirchneriella subcapitata (green algae) 1.9 ppm
 48 h EC50 : Daphnia magna (Water flea) 840 ppm

Isoxadifen-ethyl

96 h LC50 : Oncorhynchus mykiss (rainbow trout) 0.34 mg/l
 96 h LC50 : Lepomis macrochirus (Bluegill sunfish) 0.22 mg/l
 72 h EC50 : Pseudokirchneriella subcapitata (green algae) 1.26 mg/l
 48 h : Daphnia magna (Water flea) 0.51 mg/l

Toxicity to other organisms
Rimsulfuron

LD50 : Colinus virginianus (Bobwhite quail) > 2,250 mg/kg
 Oral
 LD50 : Anas platyrhynchos (Mallard duck) > 2,000 mg/kg
 Oral


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8 d LC50 : *Colinus virginianus* (Bobwhite quail) > 5,620 mg/kg
Dietary

8 d LC50 : *Anas platyrhynchos* (Mallard duck) > 5,620 mg/kg
Dietary

Mesotrione

14 d LD50 : *Colinus virginianus* (Bobwhite quail) > 2,000 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.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal : Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Disposal : Refer to the product label for instructions.

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.
(Isoxadifen-ethyl, Mesotrione)

Class : 9

Packing group : III

Labelling No. : 9MI

IMDG UN number : 3077

Proper shipping name : Environmentally hazardous substance, solid, n.o.s.
(Isoxadifen-ethyl, Mesotrione)

Class : 9

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Packing group : III
Labelling No. : 9
Marine pollutant : yes (Isoxadifen-ethyl, Mesotrione)

Not regulated by DOT/49 CFR unless shipped in bulk package or by water.

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. : 352-837
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.

PA Right to Know Regulated Chemical(s) : Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): Kaolin , Sodium sulphate , Sucrose , Silica, amorphous , Disodium hydrogenorthophosphate

NJ Right to Know Regulated Chemical(s) : Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): Silica, amorphous , Disodium hydrogenorthophosphate

SECTION 16. OTHER INFORMATION

™ Trademark 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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