

**DuPont™ Prequel® Herbicide**

Version 2.0

Revision Date 11/20/2015

Ref. 130000043985

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™ Prequel® Herbicide  
Tradename/Synonym : DPX-QFJ21 45WG Blend  
RIMSULFURON: (N-((4,6-dimethoxypyrimidin-2-yl)aminocarbonyl)-3-(ethylsulfonyl)-2-pyridinesulfonamide)  
ISOXAFLUTOLE: ([5-cyclopropyl-4-(2-methylsulfonyl-4-trifluoromethylbenzoyl)isoxazole)

Product Use : Herbicide

Restrictions on use : This product is intended to be used as a pesticide

Manufacturer/Supplier : DuPont  
974 Centre Road  
Wilmington, DE 19805, USA

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****Product hazard category**

Carcinogenicity	Category 2
Specific target organ toxicity - repeated exposure	Category 2

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**Label content**

Pictogram :



Signal word : Warning

Hazardous warnings : Suspected of causing cancer.  
May cause damage to organs through prolonged or repeated exposure. (Liver, Thyroid)

Hazardous prevention measures : Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
Use personal protective equipment as required.  
IF exposed or concerned: Get medical advice/attention.  
Store locked up.  
Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

Information presented in Section 2 conforms to the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard of 2012. See Section 15 for applicable information conforming to the requirements of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as required by the US Environmental Protection Agency (EPA), or by state Regulatory Agencies.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS-No.	Concentration

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Rimsulfuron	122931-48-0	15 %
Isoxaflutole	141112-29-0	30 %
Lignin Sulfonate Salt		1 - 5 %
Disodium phosphate		1 - 5 %
Other Ingredients		45 - 53 %

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

**SECTION 4. FIRST AID MEASURES**

- General advice** : Information presented in Section 4 conforms to the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard of 2012. See Section 15 for applicable information conforming to the requirements of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as required by the US Environmental Protection Agency (EPA), or by state Regulatory Agencies.  
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
- 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.
- 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.

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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. If eye irritation persists, consult a specialist.
Ingestion	: No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.
Most important symptoms/effects, acute and delayed	: No applicable data available.
Protection of first-aiders	: No applicable data available.
Notes to physician	: No applicable data available.

**SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media	: Water, Foam, Dry chemical, Carbon dioxide (CO2)
Unsuitable extinguishing media	: No applicable data available.
Specific hazards	: No applicable data available.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus (SCBA). Wear full protective equipment.
Further information	: Evacuate personnel and keep upwind of fire. Use water spray. Runoff from fire control may be a pollution hazard. Dike off area to prevent runoff and contamination of water sources. In the event of fire, cool 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.
Environmental precautions	: Prevent material from entering sewers, waterways, or low areas.

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Spill Cleanup : Clean up promptly by sweeping or vacuum. Shovel into suitable container for disposal.

Accidental Release Measures : 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 the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Handling (Physical Aspects) : Like all organic and most dry chemicals, as a powder or dust, this product (when mixed with air in critical proportions and in the presence of an ignition source) may present an explosion hazard.

Dust explosion class : No applicable data available.

Storage : Do not contaminate water, food or feed by disposal. Store in original container. Store in a cool, dry place.

Storage period : No applicable data available.

Storage temperature : No applicable data available.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Engineering controls : Information presented in Section 8 conforms to the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard of 2012. See Section 15 for applicable information conforming to the requirements of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as required by the US Environmental Protection Agency (EPA), or by state Regulatory Agencies.

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



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Protective eyewear  
 Chemical-resistant apron when cleaning equipment, mixing or loading  
 Refer to the product label for PPE requirements for early entry.

Protective measures : Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. 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.
AEL *	(DUPONT)	2.5 mg/m3	8 & 12 hr. TWA Respirable dust.

#### Lignin Sulfonate Salt

No applicable data available.

#### Disodium phosphate

No applicable data available.

#### Isoxaflutole

No applicable data available.

\* 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

### Appearance

Physical state	: solid
Form	: solid, granules
Color	: tan, to, brown

Odor	: slight
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Odor threshold	: No applicable data available.
pH	: 6.4 (1% solution in water)
Melting point/range	: No applicable data available.
Boiling point/boiling range	: No applicable data available.
Flash point	: No applicable data available.
Evaporation rate	: No applicable data available.
Flammability (solid, gas)	: No applicable data available.
Upper explosion limit	: No applicable data available.
Lower explosion limit	: No applicable data available.
Vapour Pressure	: No applicable data available.
Vapour density	: No applicable data available.
Density	: 0.61 - 0.71 g/cm <sup>3</sup>
Specific gravity (Relative density)	: No applicable data available.
Water solubility	: No applicable data available.
Solubility(ies)	: No applicable data available.
Partition coefficient: n-octanol/water	: No applicable data available.
Auto-ignition temperature	: No applicable data available.
Decomposition temperature	: No applicable data available.
Viscosity, kinematic	: No applicable data available.
Viscosity, dynamic	: No applicable data available.


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**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	:	No applicable data available.
Chemical stability	:	Stable at normal temperatures and storage conditions.
Possibility of hazardous reactions	:	Polymerization will not occur.
Conditions to avoid	:	None reasonably foreseeable.
Incompatible materials	:	No applicable data available.
Hazardous decomposition products	:	Under fire conditions: Nitrogen oxides (NOx), Carbon oxides

**SECTION 11. TOXICOLOGICAL INFORMATION**

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Inhalation 4 h Acute toxicity estimate	:	> 5 mg/l , Rat
Dermal Acute toxicity estimate	:	> 5,000 mg/kg , Rat
Oral Acute toxicity estimate	:	> 5,000 mg/kg , Rat
Skin irritation	:	No skin irritation, Rabbit
Eye irritation	:	No eye irritation, Rabbit Minimal effects that do not meet the threshold for classification.
Sensitisation	:	Animal test did not cause sensitization by skin contact., Mouse
Further information	:	Information given is based on data on the components and the toxicology of similar products.
Further information	:	Information presented in this Section conforms to the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard of 2012. See Section 15 for applicable information conforming to the requirements of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as required by the US Environmental Protection Agency (EPA), or by state Regulatory Agencies.

Rimsulfuron

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

Oral  
multiple species

-  
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.

## Isoxaflutole

- Repeated dose toxicity : Ingestion  
Rat  
- 104 Weeks  
NOAEL: 5 mg/kg  
LOAEL: 50 mg/kg  
Target Organs: Liver, Thyroid  
Liver effects, Thymus effects
- Carcinogenicity : Suspected human carcinogens  
An increased incidence of tumours was observed in laboratory animals.
- Mutagenicity : Animal testing did not show any mutagenic effects.  
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
- Reproductive toxicity : No toxicity to reproduction  
Animal testing showed no reproductive toxicity.  
No effects on or via lactation
- Teratogenicity : Animal testing showed no developmental toxicity.

## Lignin Sulfonate Salt

- Repeated dose toxicity : Ingestion  
Rat



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- 16 Weeks

NOAEL: 2,830 mg/kg

No toxicologically significant effects were found., Information given is based on data obtained from similar substances.

No toxicologically significant effects were found., Information given is based on data obtained from similar substances.

**Mutagenicity** : Animal testing did not show any mutagenic effects.  
Did not cause genetic damage in cultured bacterial cells.  
Information given is based on data obtained from similar substances.

### Carcinogenicity

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

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 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
120 h EbC50	:	Selenastrum capricornutum (green 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

#### Isoxaflutole

96 h LC50	:	Oncorhynchus mykiss (rainbow trout) 160 mg/l
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96 h EC50	:	Pseudokirchneriella subcapitata (green algae) 0.12 mg/l
120 h NOEC	:	Navicula pelliculosa (Diatom) 0.0086 mg/l
48 h EC50	:	Daphnia magna (Water flea) > 1.5 mg/l
28 d	:	NOEC Oncorhynchus mykiss (rainbow trout) 0.08 mg/l
21 d	:	NOEC Daphnia magna (Water flea) 0.35 mg/l

## Environmental Fate

## Rimsulfuron

Biodegradability : According to the results of tests of biodegradability this product is not readily biodegradable.

Bioaccumulation : Does not bioaccumulate.

Additional ecological information : Environmental Hazards: Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. 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 weather conditions favour drift from areas treated. See product label for additional application instructions relating to environmental precautions.

**SECTION 13. DISPOSAL CONSIDERATIONS**

Waste disposal methods - Product : 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. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.

Waste disposal methods - Container : Container Refilling and Disposal:  
Refer to the product label for instructions.  
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.

Contaminated packaging : No applicable data available.



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### SECTION 14. TRANSPORT INFORMATION

IATA_C	UN number	: 3077
	Proper shipping name	: Environmentally hazardous substance, solid, n.o.s.
	Class	: 9
	Packing group	: III
	Labelling No.	: 9MI
IMDG	UN number	: 3077
	Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Rimsulfuron, Isoxaflutole)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9
	Marine pollutant	: yes (Isoxaflutole)

Not regulated as a hazardous material by DOT.

Not regulated as a hazardous material by IATA.

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA special provision A197, and ADR/RID special provision 375.

### SECTION 15. REGULATORY INFORMATION

Other regulations : This Safety Data Sheet is for a pesticide product registered by the US Environmental Protection Agency (USEPA) and various state regulatory agencies, and is therefore also subject to certain requirements under US and state pesticide laws, including the Federal Insecticide Fungicide and Rodenticide Act (FIFRA). These requirements differ from the classification criteria and hazard information required by OSHA for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is information determined by USEPA, and various states.

Caution

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Harmful if inhaled. Causes moderate eye irritation. Avoid breathing dust. Do not get in eyes or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SARA 313 Regulated Chemical(s) : 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. : 352-779  
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**

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Revision Date : 11/20/2015

Contact person : DuPont Crop Protection, Wilmington, DE, 19805, Phone: 1-888-638-7668

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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