

**DuPont™ Resolve® DF Herbicide**

Version 3.0

Issue Date : 03/18/2019  
Revision Date : 10/12/2018

Ref. 130000034042

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™ Resolve® DF Herbicide  
Tradename/Synonym : DPX-E9636 25DF  
Rimsulfuron 25DF  
Titus 25DF  
DuPont DPX-E9636 25 DF Herbicide  
Matrix Herbicide  
B10022922  
RIMSULFURON (N-[[[4,6-dimethoxy-2-pyrimidinyl]amino]carbonyl]-3-(ethylsulfonyl)-2-pyridinesulfonamide)

Product Use : Herbicide

Restrictions on use : Do not use product for anything outside of the above specified uses.

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 : +1-800-424-9300 (outside the U.S. +1-703-527-3887)

**SECTION 2. HAZARDS IDENTIFICATION**

Not classified as a hazardous substance or mixture according to the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard 2012.

**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	25 %
Modified Aromatic Sulfonate Salt		10 - 15 %
Other Ingredients		60 - 65 %

**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.  
For medical emergencies involving this product, call toll free 1-800-441-3637. See Label for Additional Precautions and Directions for Use.  
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
- Inhalation : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.
- 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.
- 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**

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- Suitable extinguishing media : Water spray, Dry chemical, Foam, Carbon dioxide (CO<sub>2</sub>)
- Unsuitable extinguishing media : High volume water jet, (contamination risk)
- Specific hazards : Not a fire or explosion hazard.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Wear full protective equipment.
- Further information : (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) : No applicable data available.
- Environmental precautions : Prevent further leakage or spillage. Prevent material from entering sewers, waterways, or low areas.
- Spill Cleanup : Shovel or sweep up. Avoid dust formation. Dispose of in an approved container.
- Accidental Release Measures : Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

**SECTION 7. HANDLING AND STORAGE**

- Handling (Personnel) : Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

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Handling (Physical Aspects) : No applicable data available.  
Dust explosion class : No applicable data available.  
Storage : Do not contaminate water, other pesticides, fertilizer, food or feed in storage.  
Store in original container. Keep out of the reach of children.  
  
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. 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
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AEL *	(DuPont)	2.5 mg/m3	8 & 12 hr. TWA
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**Modified Aromatic Sulfonate Salt**

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  
Color : off-white, or, tan

Odor : none

Odor threshold : No applicable data available.

pH : 6.2 - 7.2  
(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 : 0.58 - 0.7 g/cm3

Specific gravity (Relative : No applicable data available.

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density)

Bulk density : Tapped  
Water solubility : dispersible  
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.

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No applicable data available.  
Chemical stability : Stable under normal conditions.  
Possibility of hazardous reactions : Polymerization will not occur.  
Conditions to avoid : No applicable data available.  
Incompatible materials : None reasonably foreseeable.  
Hazardous decomposition products : No materials to be especially mentioned.

**SECTION 11. TOXICOLOGICAL INFORMATION**

DuPont™ Resolve® DF Herbicide  
Inhalation 4 h LC50 : > 7.5 mg/l , Rat  
Dermal LD50 : > 2,000 mg/kg , Rabbit  
Oral LD50 : > 5,000 mg/kg , Rat  
Skin irritation : No skin irritation, Rabbit

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- 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., Guinea pig
- 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 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.

**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.

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**SECTION 12. ECOLOGICAL INFORMATION**

## Aquatic Toxicity

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96 h LC50	: Oncorhynchus mykiss (rainbow trout) > 1,000 mg/l
96 h LC50	: Lepomis macrochirus (Bluegill sunfish) > 1,000 mg/l
72 h EC50	: Pseudokirchneriella subcapitata (green algae) 0.805 mg/l
14 d EC50	: Lemna gibba (duckweed) 0.031 mg/l
48 h EC50	: Daphnia magna (Water flea) > 1,000 mg/l
21 d NOEC	: Daphnia magna (Water flea) 4.0 mg/l (Data on the product itself)

## Rimsulfuron

90 d	: NOEC Oncorhynchus mykiss (rainbow trout) 110 mg/l
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## 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: 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.
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**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.
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Waste disposal methods -	: Container Refilling and Disposal:
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Container 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.

**SECTION 14. TRANSPORT INFORMATION**

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

Not regulated as a hazardous material by DOT.

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

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determined by USEPA, and various states.

**Caution**

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

SARA 311/312 Hazard classification : No SARA Hazards

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.

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): Disodium hydrogenorthophosphate, Sodium sulphate

EPA Reg. No. : 352-556  
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 : This product can expose you to Naphthalene, which is/are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**SECTION 16. OTHER INFORMATION**

	NFPA
Health :	1
Flammability :	0
Reactivity/Physical hazard :	0

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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.