



## DuPont™ Resolve® SG Herbicide

Version 3.0

Issue Date : 03/18/2019 Ref. 130000043334  
 Revision Date : 02/11/2019

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® SG Herbicide  
 Tradename/Synonym : DuPont Rimsulfuron 25SG Herbicide  
 DPX-E9636 25SG  
 RIMSULFURON: N-((4,6-dimethoxypyrimidin-2-yl)aminocarbonyl)-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
Rimsulfuron	122931-48-0	25 %
Lignin Sulfonate Salt		6 %


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Disodium phosphate		8 %
Other Ingredients		61 %

Present as an impurity in the clay component of this product:

Titanium dioxide	13463-67-7	0.1 - 0.5 %
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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 : 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.  
 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.
- 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.

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Protection of first-aiders : No applicable data available.  
Notes to physician : No applicable data available.

**SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Water spray, Foam, Dry chemical, Carbon dioxide (CO<sub>2</sub>)

Unsuitable extinguishing media : High volume water jet, (contamination risk)

Specific hazards : No applicable data available.

Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.

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.  
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. Use personal protective equipment.

Environmental precautions : Prevent material from entering sewers, waterways, or low areas.

Spill Cleanup : Sweep up and shovel into suitable containers for disposal.

Accidental Release Measures : Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

**SECTION 7. HANDLING AND STORAGE**



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- Handling (Personnel) : Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. 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. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing.
- Handling (Physical Aspects) : Keep away from heat and sources of ignition.
- Dust explosion class : No applicable data available.
- Storage : Store in original container. Store in a cool, dry place. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. 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 : Ensure adequate ventilation. 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  
 Wear shoes with conductive soles.  
 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


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instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

## Exposure Guidelines

## Exposure Limit Values

<b>Rimsulfuron</b>			
AEL *	(DuPont)	5 mg/m3	8 & 12 hr. TWA
AEL *	(DuPont)	2.5 mg/m3	8 & 12 hr. TWA

<b>Lignin Sulfonate Salt</b>			
No applicable data available.			

<b>Disodium phosphate</b>			
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 : granules  
 Color : light brown

Odor : mild

Odor threshold : No applicable data available.

pH : 6.7

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.

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Lower explosion limit : No applicable data available.  
Vapour Pressure : No applicable data available.  
Vapour density : No applicable data available.  
Specific gravity (Relative density) : No applicable data available.  
Bulk density : Tapped  
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.

**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 materials to be especially mentioned.  
Hazardous decomposition products : No applicable data available.

**SECTION 11. TOXICOLOGICAL INFORMATION**


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Inhalation 4 h LC50 : > 5 mg/l , Rat

Dermal LD50 : > 5,000 mg/kg , Rat

Oral LD50 : > 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 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.

**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.

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.

## Disodium phosphate

Repeated dose toxicity : Ingestion  
Dog

- 90 d

NOAEL: 322.88 mg/kg

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

Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.  
Evidence suggests this substance does not cause genetic damage in animals.  
Information given is based on data obtained from similar substances.

Reproductive toxicity : No toxicity to reproduction  
Animal testing showed no reproductive toxicity.  
Information given is based on data obtained from similar substances.

Teratogenicity : Animal testing showed no developmental toxicity.  
Information given is based on data obtained from similar substances.

## Titanium dioxide

Repeated dose toxicity : Oral  
Rat

-

NOAEL: 1,000 mg/kg Method: OECD Test Guideline 408

No toxicologically significant effects were found.

Carcinogenicity : Not classifiable as a human carcinogen.  
Overall weight of evidence indicates that the substance is not carcinogenic.

Mutagenicity : Animal testing did not show any mutagenic effects.  
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.




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Reproductive toxicity : Animal testing showed no reproductive toxicity.

Teratogenicity : Animal testing showed no developmental toxicity.

**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).

Material	IARC	NTP	OSHA
Titanium dioxide	2B		

**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

**Disodium phosphate**

96 h LC50	: Oncorhynchus mykiss (rainbow trout) > 100 mg/l OECD Test Guideline 203 Information given is based on data obtained from similar substances.
72 h ErC50	: Desmodesmus subspicatus (green algae) > 100 mg/l OECD Test Guideline 201 Information given is based on data obtained from similar substances.
72 h NOEC	: Desmodesmus subspicatus (green algae) > 100 mg/l OECD Test Guideline 201 Information given is based on data obtained from similar substances.


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48 h EC50 : Daphnia magna (Water flea) > 100 mg/l OECD Test Guideline 202  
 Information given is based on data obtained from similar substances.

## Titanium dioxide

96 h LC50 : Pimephales promelas (fathead minnow) > 1,000 mg/l

72 h ErC50 : Pseudokirchneriella subcapitata (green algae) > 100 mg/l see user  
 defined free text

72 h NOEC : Algae 5,600 mg/l see user defined free text

48 h EC50 : Daphnia magna (Water flea) > 100 mg/l OECD Test Guideline 202

## 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.

**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.

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. (Rimsulfuron)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9
IMDG	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 determined by USEPA, and various states.

#### Caution

Avoid contact with skin, eyes and 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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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): Kaolin, Disodium phosphate, Sucrose, Sodium sulphate

CERCLA Reportable Quantity : Based on the percentage composition of this chemical in the product.:  

	Disodium phosphate
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SARA Reportable Quantity : This material does not contain any components with a SARA 302 RQ.

EPA Reg. No. : 352-748  
 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 substances including Titanium dioxide, 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.