

**DuPont™ Instigate™ Herbicide**

Version 2.1

Revision Date 09/14/2012

Ref. 130000093838

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™ Instigate™ Herbicide
Tradename/Synonym : DPX-SGJ25 WG Blend
B12818512
Rimsulfuron: N-((4,6-dimethoxypyrimidin-2-yl)aminocarbonyl)-3-(ethylsulfonyl)-2-pyridinesulfonamide
Mesotrione: 2-[4-(methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexandione

MSDS Number : 130000093838

Product Use : Herbicide

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. Avoid contact with skin, eyes and clothing.

Potential Health Effects

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

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

Repeated exposure

Quartz : DuPont has classified this material as a known human carcinogen.

Target Organs



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Mesotrione : Eyes

| Carcinogenicity Material | IARC | NTP | OSHA |
|--------------------------|------|-----|------|
| Titanium dioxide | 2B | | |
| Quartz | 1 | X | |

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS-No. | Concentration |
|-------------------|-------------|---------------|
| Rimsulfuron | 122931-48-0 | 4.17 % |
| Mesotrione | 104206-82-8 | 41.67 % |
| Other Ingredients | | 54.16 % |

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

| | | |
|------------------|--|------|
| Titanium Dioxide | | <1 % |
| Quartz | | <1 % |

SECTION 4. FIRST AID MEASURES

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- Skin contact : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.
- 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 : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.
- 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. FIREFIGHTING 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.

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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.

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. 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.
- 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 : Ensure 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



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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

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

AEL * (DUPONT) 2.5 mg/m3 8 & 12 hr. TWA Respirable dust.

Titanium dioxide
PEL: (OSHA) 15 mg/m3 8 hr. TWA Total dust.

TLV (ACGIH) 10 mg/m3 TWA

AEL * (DUPONT) 10 mg/m3 8 & 12 hr. TWA Total dust.

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

Quartz
PEL: (OSHA) 2.4 millions of particles per cubic foot of air TWA
Respirable.

Remarks The exposure limit is calculated from the equation, $250/(\%SiO_2+5)$, using a value of 100% SiO₂. Lower percentages of SiO₂ will yield higher exposure limits.

PEL: (OSHA) 0.1 mg/m3 TWA Respirable.
Remarks The exposure limit is calculated from the equation, $10/(\%SiO_2+2)$, using a value of 100% SiO₂. Lower percentages of SiO₂ will yield higher exposure limits.

PEL: (OSHA) 0.3 mg/m3 TWA Total dust.


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| | | Remarks | |
|-------|----------|-------------------------|--|
| | | | The exposure limit is calculated from the equation, $30/(\%SiO_2+2)$, using a value of 100% SiO ₂ . Lower values of % SiO ₂ will give higher exposure limits. |
| TLV | (ACGIH) | 0.025 mg/m ³ | TWA Respirable fraction. |
| AEL * | (DUPONT) | 0.01 mg/m ³ | 12 hr. TWA Respirable dust. |
| AEL * | (DUPONT) | 0.02 mg/m ³ | 8 hr. TWA Respirable dust. |

* 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 |
| pH | : 3.4 - 4.4 |
| Bulk density | : 0.5 - 0.7 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. |
| Hazardous reactions | : Polymerization will not occur. |

SECTION 11. TOXICOLOGICAL INFORMATION

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| | | | |
|-------------|------------------------|---|--|
| | Inhalation 4 h LC50 | : | 2.58 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 |
| | Further information | : | Information given is based on data on the components. |
| 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. |


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Mutagenicity : Did not show mutagenic effects in animal experiments.

Reproductive toxicity : Animal testing showed no reproductive toxicity.

Teratogenicity : Animal testing showed no developmental toxicity.

Titanium Dioxide

Carcinogenicity : Based upon all available study results, DuPont scientists conclude that titanium dioxide will not cause lung cancer or chronic respiratory diseases in humans at concentrations experienced in the workplace.

Quartz

Repeated dose toxicity : Inhalation
Fluid retention in lungs (pulmonary oedema), lung effects,
Inflammation, Chronic lung disease, Fibrosis

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

Rimsulfuron

96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 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

Mesotrione

96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 114 mg/l

5 d EC50 : Pseudokirchneriella subcapitata (green algae) 1.9 mg/l

48 h EC50 : Daphnia magna (Water flea) 840 mg/l

Additional ecological information : Environmental Hazards: Do not apply directly to water, or to areas


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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. See product label for additional application instructions relating to environmental precautions.

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 : 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.

SECTION 14. TRANSPORT INFORMATION

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

Not regulated as a hazardous material by DOT.

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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. : 352-873
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 : WARNING! This product contains a chemical or chemicals known to the State of California to cause cancer.
- 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 , Disodium hydrogen orthophosphate (for Italian CPP)

SECTION 16. OTHER INFORMATION

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

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