

**DuPont™ Instigate™ Herbicide**

Version 2.0

Revision Date 11/22/2015

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

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

SECTION 2. HAZARDS IDENTIFICATION**Product hazard category**

Serious eye damage/eye irritation Category 2B

Label content

Pictogram : not required

Signal word : Warning


DuPont™ Instigate™ Herbicide

Version 2.0

Revision Date 11/22/2015

Ref. 130000093838

Hazardous warnings : Causes eye irritation.

Hazardous prevention measures : Wash skin thoroughly after handling.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/ attention.

Other hazards

If you mill or grind this product you may change its toxicological properties.

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	4.17 %
Sodium alkylnaphthalene sulfonate		1 - 5 %
Mesotrione	104206-82-8	41.67 %
Modified Aromatic Sulfonate Salt		5 - 10 %
Titanium dioxide	13463-67-7	0.1 - 0.5 %


DuPont™ Instigate™ Herbicide

Version 2.0

Revision Date 11/22/2015

Ref. 130000093838

Other Ingredients		38.26 - 48.46 %
-------------------	--	--------------------

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.
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 : 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.
- 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.

**DuPont™ Instigate™ Herbicide**

Version 2.0

Revision Date 11/22/2015

Ref. 130000093838

Notes to physician : No applicable data available.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray, Foam, Dry chemical, Carbon dioxide (CO₂)
- 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.

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

- 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



DuPont™ Instigate™ Herbicide

Version 2.0

Revision Date 11/22/2015

Ref. 130000093838

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.
- Dust explosion class : No applicable data available.
- 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.
- 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. 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
- 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.


DuPont™ Instigate™ Herbicide

Version 2.0

Revision Date 11/22/2015

Ref. 130000093838

**Exposure Guidelines
Exposure Limit Values**
Rimsulfuron

AEL *	(DUPONT)	5 mg/m ³	8 & 12 hr. TWA Total dust.
AEL *	(DUPONT)	2.5 mg/m ³	8 & 12 hr. TWA Respirable dust.

Sodium butylnaphthalenesulphonate
No applicable data available.

Mesotrione

No applicable data available.

Alkyl-naphthalenesulfonic acid, sodium salt/formaldehyde polycondensate
No applicable data available.

Titanium dioxide

Permissible exposure limit:	(OSHA)	15 mg/m ³	8 hr. TWA Total dust.
TLV	(ACGIH)	10 mg/m ³	TWA
AEL *	(DUPONT)	10 mg/m ³	8 & 12 hr. TWA Total dust.
AEL *	(DUPONT)	5 mg/m ³	8 & 12 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
Appearance

Physical state	: solid
Form	: solid, granules
Color	: No applicable data available.

Odor : No applicable data available.

Odor threshold : No applicable data available.

**DuPont™ Instigate™ Herbicide**

Version 2.0

Revision Date 11/22/2015

Ref. 130000093838

pH	: 3.4 - 4.4
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	: 0.5 - 0.6 g/cm ³ at 22.2 °C (72.0 °F)
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.

SECTION 10. STABILITY AND REACTIVITY


DuPont™ Instigate™ Herbicide

Version 2.0

Revision Date 11/22/2015

Ref. 130000093838

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

DuPont™ Instigate™ Herbicide

Inhalation 4 h Acute toxicity estimate	:	2.8 mg/l , Rat
Dermal Acute toxicity estimate	:	> 5,000 mg/kg , Rat
Oral Acute toxicity estimate	:	> 5,000 mg/kg , Rat
Skin irritation	:	No eye irritation, Rabbit Minimal effects that do not meet the threshold for classification.
Eye irritation	:	Mild eye irritation, Rabbit
Sensitisation	:	Did not cause sensitisation on laboratory animals., Guinea pig Mouse
Further information	:	Information given is based on data on the components.
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
------------------------	---	---


DuPont™ Instigate™ Herbicide

Version 2.0

Revision Date 11/22/2015

Ref. 130000093838

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.

Mesotrione

- Repeated dose toxicity : No toxicological effects warranting significant target organ toxicity classification were seen below the recommended guidance values for classification., Reduced body weight gain, Increased liver weight, Increased kidney weight, altered hematology, eye effects, Cataracts
- Carcinogenicity : Not classifiable as a human carcinogen.
- Mutagenicity : Animal testing did not show any mutagenic effects.
- Reproductive toxicity : No toxicity to reproduction
- Teratogenicity : Animal testing showed no developmental toxicity.

Titanium dioxide

- Repeated dose toxicity : Oral
Rat
-
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.


DuPont™ Instigate™ Herbicide

Version 2.0

Revision Date 11/22/2015

Ref. 130000093838

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

Sodium alkylnaphthalene sulfonate

48 h LC50	: Oryzias latipes (Orange-red killifish) 360 mg/l
72 h EC50	: Algae 102.5 mg/l
48 h EC50	: Daphnia (water flea) 334.2 mg/l

Mesotrione

96 h LC50	: Oncorhynchus mykiss (rainbow trout) > 120 mg/l
-----------	--


DuPont™ Instigate™ Herbicide

Version 2.0

Revision Date 11/22/2015

Ref. 130000093838

72 h EC50 : Pseudokirchneriella subcapitata (green algae) 4.5 mg/l

48 h EC50 : Daphnia magna (Water flea) 900 mg/l

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.

Sodium alkylnaphthalene sulfonate

Biodegradability : Not readily biodegradable.

Bioaccumulation : Bioaccumulation is unlikely.

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. 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 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 Refilling and Disposal:


DuPont™ Instigate™ Herbicide

Version 2.0

Revision Date 11/22/2015

Ref. 130000093838

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, 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.

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.



DuPont™ Instigate™ Herbicide

Version 2.0

Revision Date 11/22/2015

Ref. 130000093838

Caution

Causes moderate eye irritation. Avoid contact with skin, eyes and clothing.

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, Sodium sulphate, Disodium hydrogenorthophosphate
CERCLA Reportable Quantity	: 374251 lbs Based on the percentage composition of this chemical in the product.: Disodium hydrogenorthophosphate
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.

SECTION 16. OTHER INFORMATION

™ Trademark of E.I. du Pont de Nemours and Company.
 ® Registered trademark of E.I. du Pont de Nemours and Company

Revision Date : 11/22/2015

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.



DuPont™ Instigate™ Herbicide

Version 2.0

Revision Date 11/22/2015

Ref. 130000093838

Significant change from previous version is denoted with a double bar.