

**DuPont™ Viewpoint™ Herbicide**

Version 2.3

Revision Date 12/14/2010

Ref. 130000050670

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™ Viewpoint™ Herbicide
Tradename/Synonym : DPX-Q2K12 WG
B12846315
IMAZAPYR: (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid)
AMINOCYCLOPYRACHLOR: 6-amino-5-chloro-2-cyclopropyl-4-pyrimidinecarboxylate
METSULFURON METHYL: Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]-carbonyl]amino]sulfonyl] benzoate

MSDS Number : 130000050670

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 eye irritation. Avoid contact with skin, eyes and clothing. Harmful if absorbed through skin. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before re-use.

Potential Health Effects

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

Skin : May cause: Irritation with discomfort or rash.


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

Carcinogenicity
Material

IARC

NTP

OSHA

Titanium dioxide

2B

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Imazapyr	81334-34-1	31.6 %
Aminocyclopyrachlor	858956-08-8	22.8 %
Metsulfuron methyl	74223-64-6	7.3 %
Inert Ingredients		38.3 %

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

Titanium Dioxide		<1 %
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SECTION 4. FIRST AID MEASURES

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. Call a poison control center or doctor for treatment advice.
- 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.
- Ingestion : Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Do not give anything by mouth to an unconscious person.
- 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. FIRE-FIGHTING 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) : Spray solutions of this product must be mixed, stored, and applied only in stainless steel, fiberglass, plastic, and plastic-lined steel containers. Do not mix, store, or apply this product or spray solutions of this product in unlined steel (except stainless steel) containers or spray tanks.
- 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 : When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. Refer to the product label for additional Engineering Controls.
- Personal protective equipment
 - Skin and body protection : Mixers, loaders, applicators and other handlers must wear:
 - Long sleeved shirt and long pants
 - Shoes plus socks
 - Chemical-resistant gloves for all mixers and loaders, plus applicators using handheld equipment.
- 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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.

Exposure Guidelines

Exposure Limit Values

Aminocyclopyrachlor

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

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

Metsulfuron methyl

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

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.

* 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, granules
 Color : cream, off-white, tan
 pH : 5.4 - 6.2
 Oxidizing : The product is not oxidizing.
 Bulk density : 0.50 - 0.58 g/ml
 Water solubility : dispersible


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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.

SECTION 11. TOXICOLOGICAL INFORMATION

- DuPont™ Viewpoint™ Herbicide
- Inhalation 4 h LC50 : > 5.0 mg/l , rat
- Dermal LD50 : > 2,000 mg/kg , rabbit
- Oral LD50 : > 5,000 mg/kg , rat
- Skin irritation : slight irritation, rat
- Eye irritation : Moderate eye irritation, rabbit
- Sensitisation : Animal test did not cause sensitization by skin contact., multiple species
- Further information : Information given is based on data on the components and the toxicology of similar products.
- Imazapyr
- Carcinogenicity : Animal testing did not show any carcinogenic effects.
- Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
- Reproductive toxicity : Animal testing showed no reproductive toxicity.
- Teratogenicity : Animal testing showed no developmental toxicity.
- Aminocyclopyrachlor
- Carcinogenicity : Animal testing did not show any carcinogenic effects.
- Mutagenicity : Evidence suggests this substance does not cause genetic damage in



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cultured bacterial cells.
 Evidence suggests this substance does not cause genetic damage in cultured mammalian cells.
 Evidence suggests this substance does not cause genetic damage in animals.

Reproductive toxicity : No toxicity to reproduction

Teratogenicity : Evidence suggests the substance is not a developmental toxin in animals.

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

Oral
 rat
 Reduced body weight gain, Organ weight changes, Liver

Dermal
 rabbit
 Skin irritation

Carcinogenicity : Did not show carcinogenic effects in animal experiments.

Mutagenicity : Did not show mutagenic effects in animal experiments.

Did not cause genetic damage in cultured bacterial cells.

Genetic damage in cultured mammalian cells was observed in some laboratory tests but not in others.

Reproductive toxicity : Animal testing did not show any effects on fertility.

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.


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SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

Imazapyr

- 96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 100 mg/l
- 96 h LC50 : Lepomis macrochirus (Bluegill sunfish) > 100 mg/l
- 48 h EC50 : Daphnia magna (Water flea) > 100 mg/l

Aminocyclopyrachlor

- 96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 122 mg/l
- 96 h LC50 : Lepomis macrochirus (Bluegill sunfish) > 120 mg/l
- 72 h EC50 : Pseudokirchneriella subcapitata (green algae) > 122 mg/l
- 72 h EC50 : Anabaena flos-aquae (cyanobacteria) 7.4 mg/l
- 96 h EC50 : Daphnia magna (Water flea) 43 mg/l

Metsulfuron methyl

- 96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 150 mg/l
- 72 h EC50 : Anabaena flos-aquae (cyanobacteria) 0.066 mg/l
- 14 d EC50 : Lemna minor 0.00036 mg/l
- 48 h EC50 : Daphnia magna (Water flea) > 120 mg/l

Toxicity to other organisms

Aminocyclopyrachlor

- LD50 : Colinus virginianus (Bobwhite quail) > 2,075 mg/kg
Oral
- LC50 : Colinus virginianus (Bobwhite quail) > 5,620 ppm
Dietary
- LC50 : Anas platyrhynchos (Mallard duck) > 5,620 ppm
Dietary


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Metsulfuron methyl
LD50 : Anas platyrhynchos (Mallard duck) > 2,510 mg/kg

LC50 : Colinus virginianus (Bobwhite quail) > 5,620 mg/kg

Additional ecological information : Environmental Hazards: Toxic to plants. 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. 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 : 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. (Metsulfuron methyl)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9MI
IMDG	UN number	: 3077
	Proper shipping name	: Environmentally hazardous substance, solid, n.o.s. (Metsulfuron methyl)
	Class	: 9
	Packing group	: III

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Labelling No. : 9

Marine pollutant : yes (Metsulfuron methyl)

Not regulated as a hazardous material by DOT.

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. : 352-847
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.

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

SECTION 16. OTHER INFORMATION

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

Contact person : DuPont Crop Protection, Wilmington, DE, 19898, 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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