

**DuPont™ Perspective™ Herbicide**

Version 2.3

Revision Date 12/13/2010

Ref. 130000050672

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™ Perspective™ Herbicide
Tradename/Synonym : DPX-Q2K06 WG
B12846349
AMINOCYCLOPYRACHLOR: 6-Amino-5-chloro-2-cyclopropyl-4-pyrimidinecarboxylic acid
CHLORSULFURON: 2-Chloro-N-[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)aminocarbonyl] benzenesulfonamide

MSDS Number : 130000050672

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

Harmful if swallowed. Causes moderate eye irritation. Do not get in eyes or on clothing.

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.

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

Carcinogenicity


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| | | | |
|------------------|------|-----|------|
| Material | IARC | NTP | OSHA |
| Titanium dioxide | 2B | | |

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS-No. | Concentration |
|---------------------|-------------|---------------|
| Aminocyclopyrachlor | 858956-08-8 | 39.5 % |
| Chlorsulfuron | 64902-72-3 | 15.8 % |
| Other Ingredients | | 44.7 % |

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

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

SECTION 4. FIRST AID MEASURES

| | |
|--------------|---|
| Skin contact | : The material is not likely to be hazardous by skin contact, but cleansing the skin after use is advisable. |
| 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. |



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- 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)
- Firefighting Instructions : In the event of fire, wear self-contained breathing apparatus. Wear full protective equipment.
If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. In the event of fire, cool 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. Wear personal protective equipment.
- Spill Cleanup : Sweep up and shovel into suitable containers for disposal.
- Accidental Release Measures : Prevent material from entering sewers, waterways, or low areas.

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



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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

Personal protective equipment

Skin and body protection : Applicators and other handlers must wear:
 Long sleeved shirt and long pants
 Chemical resistant gloves made of any waterproof material
 Shoes plus socks

Protective measures : Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. 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

Aminocyclopyrachlor

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

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

Chlorsulfuron

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

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

Titanium dioxide

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

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| | | | | |
|-------|----------|----------|----------------|------------------|
| 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 | : granular |
| Color | : cream, light tan |
| Odor | : slight |
| pH | : 5.6 |
| Bulk density | : 0.57 mg/l |
| Water solubility | : dispersible |

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™ Perspective™ Herbicide | |
| Inhalation 4 h LC50 | : > 5.11 mg/l , rat |
| Dermal LD50 | : > 5,000 mg/kg , rat |
| Oral LD50 | : > 5,000 mg/kg , rat |
| Skin irritation | : slight irritation, rabbit |



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| | | |
|------------------------|---|--|
| Eye irritation | : | Moderate eye irritation, rabbit |
| Sensitisation | : | Animal test did not cause sensitization by skin contact., mice |
| Aminocyclopyrachlor | | |
| Carcinogenicity | : | Animal testing did not show any carcinogenic effects. |
| Mutagenicity | : | Evidence suggests this substance does not cause genetic damage in 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. |
| Chlorsulfuron | | |
| Repeated dose toxicity | : | The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions. Inhalation rat Reduced body weight gain, Kidney effects, Spleen effects, Bloody urine, bone marrow changes Oral rat Reduced body weight gain, altered blood chemistry Oral dog Abnormal decrease in number of red blood cells |
| Carcinogenicity | : | The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions. A slight increased incidence in tumors was observed in one species, but not in other species. |


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 Target(s):
 Leydig cells

- Mutagenicity : Did not cause genetic damage in cultured bacterial cells.
 Did not cause genetic damage in animals.
 Did not cause genetic damage in cultured mammalian cells.
- Reproductive toxicity : Animal testing showed no reproductive toxicity.
- Teratogenicity : The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.
 Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal 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.

SECTION 12. ECOLOGICAL INFORMATION

- Aquatic Toxicity
 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
- Chlorsulfuron
- 96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 122 mg/l
- 96 h LC50 : Lepomis macrochirus (Bluegill sunfish) > 128 mg/l


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96 h LC50 : Cyprinodon variegatus (sheepshead minnow) > 980 mg/l
 120 h EbC50 : Pseudokirchneriella subcapitata (green algae) 0.05 mg/l
 48 h EC50 : Daphnia magna (Water flea) > 112 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

Chlorsulfuron

LD50 : Anas platyrhynchos (Mallard duck) > 5,000 mg/kg
 Oral

LD50 : Colinus virginianus (Bobwhite quail) > 5,000 mg/kg
 Oral

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

8 d LC50 : Anas platyrhynchos (Mallard duck) > 5,620 mg/kg
 Dietary

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. 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


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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. (Chlorsulfuron) |
| | Class | : 9 |
| | Packing group | : III |
| | Labelling No. | : 9MI |
| IMDG | UN number | : 3077 |
| | Proper shipping name | : Environmentally hazardous substance, solid, n.o.s. (Chlorsulfuron) |
| | Class | : 9 |
| | Packing group | : III |
| | Labelling No. | : 9 |
| | Marine pollutant | : yes (Chlorsulfuron) |

Not regulated as a hazardous material by DOT.

SECTION 15. REGULATORY INFORMATION

SARA 313 Regulated Chemical(s) : Chlorsulfuron

Title III hazard : Acute Health Hazard: Yes



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classification Chronic Health Hazard: No
 Fire: No
 Reactivity/Physical hazard: No
 Pressure: No

EPA Reg. No. : 352-846
 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 known to the State of California to cause birth defects or other reproductive harm. Chlorsulfuron

PA Right to Know : Substances on the Pennsylvania Hazardous Substances List present at Regulated Chemical(s) a concentration of 1% or more (0.01% for Special Hazardous Substances): Kaolin , Sodium sulphate

SECTION 16. OTHER INFORMATION

| | NFPA | HMIS |
|------------------------------|------|------|
| Health : | 1 | 1 |
| Flammability : | 1 | 1 |
| Reactivity/Physical hazard : | 0 | 0 |

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

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