

**DuPont™ Canopy® EX Herbicide**

Version 2.0

Revision Date 07/12/2013

Ref. 130000029384

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™ Canopy® EX Herbicide
Tradename/Synonym : Canopy Ex
DPX-JXH53
B11731688
Chlorimuron Ethyl : Ethyl 2-[[[(4-chloro-6-methoxypyrimidin-2-yl)amino]carbonyl]amino]sulfonyl]benzoate
Tribenuron methyl : Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)methylamino]carbonyl]amino]sulfonyl]benzoate

MSDS Number : 130000029384

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 absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes and clothing.
Wash thoroughly with soap and water after handling.

Potential Health Effects

Skin : May cause: Irritation with discomfort or rash.

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

Ingestion



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Chlorimuron ethyl : Gross overexposure may cause: Abnormal decrease in number of red blood cells (anaemia) which could produce tiredness, rapid heartbeat, dizziness, pale skin, leg cramps, shortness of breath.

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

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Chlorimuron ethyl	90982-32-4	22.7 %
Tribenuron methyl	101200-48-0	6.8 %
Other Ingredients		70.5 %

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

Quartz		<1 %
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.
- 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

- Flammable Properties
Auto-ignition temperature : 330 °C (626 °F)
- Lower explosion limit/ lower flammability limit : 0.212 g/l
- Fire and Explosion Hazard : Under severe dusting conditions, this material may form explosive mixtures in air.
- Suitable extinguishing media : Water spray, Foam, Dry chemical, Carbon dioxide (CO2)
- Unsuitable extinguishing media : High volume water jet, (contamination risk)

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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.

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. Avoid dust formation.

Storage : Store in original container. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Keep out of the reach of children.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls : Ensure adequate ventilation. IMPORTANT: When reduced PPE is worn



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because a closed system is being used, handlers must be provided all PPE specified for "Applicators and Other Handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

Personal protective equipment

Skin and body protection : Mixers, loaders, applicators and other handlers must wear:
 Long sleeved shirt and long pants
 Chemical resistant gloves made of any waterproof material, such as polyvinyl chloride, nitrile rubber, or butyl rubber
 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 made of any waterproof material
 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.

Exposure Guidelines
Exposure Limit Values

Tribenuron methyl			
AEL *	(DUPONT)	0.5 mg/m3	12 hr. TWA
AEL *	(DUPONT)	1 mg/m3	8 hr. TWA
Chlorimuron ethyl			
AEL *	(DUPONT)	10 mg/m3	8 & 12 hr. TWA Total dust.
AEL *	(DUPONT)	5 mg/m3	8 & 12 hr. TWA Respirable dust.



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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% SiO ₂ . Lower percentages of SiO ₂ 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% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits.
PEL:	(OSHA)	0.3 mg/m3	TWA Total dust.
		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/m3	TWA Respirable fraction.
AEL *	(DUPONT)	0.01 mg/m3	12 hr. TWA Respirable dust.
AEL *	(DUPONT)	0.02 mg/m3	8 hr. TWA Respirable dust.

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which

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are lower than the AEL are in effect, such limits shall take precedence.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: solid, water dispersible granules
Color	: ivory
Odor	: none
pH	: 6.6 - 7.4
Bulk density	: 0.75 - 0.91 GJ

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	: > 5 mg/l , rat
Dermal LD50	: > 2,000 mg/kg , rabbit
Oral LD50	: > 5,000 mg/kg , rat
Skin irritation	: slight irritation, rabbit
Eye irritation	: slight irritation, rabbit
Sensitisation	: Does not cause skin sensitisation., rabbit
Further information	: Information given is based on data on the components.

Chlorimuron ethyl



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

Dermal
rabbit

No toxicologically significant effects were found.

Oral
dog

Abnormal decrease in number of red blood cells

Oral
rat

No adverse effect has been observed in chronic toxicity tests.

Carcinogenicity : Animal testing did not show any carcinogenic effects.

Mutagenicity : Did not cause genetic damage in animals.

Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Reproductive toxicity : No toxicity to reproduction

Teratogenicity : Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

Tribenuron methyl

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

Oral - feed
mouse
90 d
Reduced body weight gain

Oral
rat



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28 d
Reduced body weight gain

- Carcinogenicity : An increased incidence of tumours was observed in laboratory animals.
Target(s):
Mammary glands
- Mutagenicity : Did not cause genetic damage in cultured bacterial cells.
Did not cause genetic damage in cultured mammalian cells.
Did not cause genetic damage in animals.
- Reproductive toxicity : Animal testing showed no reproductive toxicity.
- Teratogenicity : Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.
Evidence suggests the substance is not a developmental toxin in animals.

Quartz

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

Inhalation
Fluid retention in lungs (pulmonary oedema), lung effects,
Inflammation, Chronic lung disease, Fibrosis
- Carcinogenicity : Human carcinogen.

DuPont has classified this material as a known human carcinogen.

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
Chlorimuron ethyl

- 96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 1,000 mg/l
- 96 h LC50 : Lepomis macrochirus (Bluegill sunfish) > 100 mg/l
- 72 h EC50 : Pseudokirchneriella subcapitata (green algae) 0.001 mg/l
- 48 h EC50 : Daphnia magna (Water flea) > 1,000 mg/l

Tribenuron methyl

- 96 h LC50 : Oncorhynchus mykiss (rainbow trout) 738 mg/l
- 120 h EC50 : Pseudokirchneriella subcapitata 0.0208 mg/l
- 14 d EC50 : Lemna gibba (duckweed) 0.00424 mg/l
- 48 h EC50 : Daphnia magna (Water flea) > 894 mg/l

- 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 : 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


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or night.

SECTION 14. TRANSPORT INFORMATION

IATA_C	UN number	: 3077
	Proper shipping name	: Environmentally hazardous substance, solid, n.o.s. (Chlorimuron ethyl, Tribenuron methyl)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9MI
IMDG	UN number	: 3077
	Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Chlorimuron ethyl, Tribenuron methyl)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9
	Marine pollutant	: yes (Chlorimuron ethyl, Tribenuron methyl)

Not regulated as a hazardous material by DOT.

SECTION 15. REGULATORY INFORMATION

SARA 313 Regulated Chemical(s) : Tribenuron methyl , Chlorimuron ethyl

Title III hazard classification : Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire: No
Reactivity/Physical hazard: No
Pressure: No

EPA Reg. No. : 352-635
In the United States this product is regulated by the US Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide and



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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 , Sucrose

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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