

**DuPont™ Synchrony® XP Herbicide**

Version 2.0

Revision Date 07/12/2013

Ref. 130000029432

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™ Synchrony® XP Herbicide
Tradename/Synonym : B11989190
DPX-KU253
Chlorimuron ethyl: Ethyl 2-[[[(4-chloro-6-methoxypyrimidin-2-yl)amino]carbonyl]amino]sulfonyl]benzoate
Thifensulfuron methyl : Methyl 3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino]sulfonyl]-2-thiophenecarboxylate

MSDS Number : 130000029432

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. Harmful if absorbed through skin. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling.

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.



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Inhalation

Thifensulfuron methyl : May cause: Respiratory irritation, Discomfort, Cough.

Ingestion

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	21.5 %
Thifensulfuron methyl	79277-27-3	6.9 %
Other Ingredients		71.6 %

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

Titanium Dioxide		<1 %
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Quartz		<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

- Fire and Explosion Hazard : Dust may form explosive mixture 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. Control Runoff. Evacuate personnel and keep upwind of fire. (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. Under severe dusting conditions, this material may form explosive mixtures in air.

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



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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. **IMPORTANT:** When reduced PPE is worn 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 : Applicators and other handlers must wear:
 Long sleeved shirt and long pants
 Chemical resistant gloves made of any waterproof material
 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 : Use this product in accordance with its label. 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

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

Thifensulfuron methyl



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

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* 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
Odor	: none
pH	: 6.7 - 7.5
Density	: 0.77 - 0.93 GJ
Water solubility	: dispersible

SECTION 10. STABILITY AND REACTIVITY

Stability	: Stable at normal temperatures and storage conditions.
Conditions to avoid	: To avoid thermal decomposition, do not overheat. Under severe dusting conditions, this material may form explosive mixtures in air.
Incompatibility	: No materials to be especially mentioned.
Hazardous decomposition products	: Decomposition will not occur.
Hazardous reactions	: Polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

DuPont™ Synchrony® XP Herbicide	
Inhalation 4 h LC50	: > 5 mg/l , rat
Dermal LD50	: > 2,000 mg/kg , rabbit
Oral LD50	: > 5,000 mg/kg , rat
Skin irritation	: No skin irritation, rat

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Eye irritation	:	slight irritation, rabbit
Sensitisation	:	Does not cause skin sensitisation., guinea pig
Chlorimuron ethyl Repeated dose toxicity	:	<p>The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.</p> <p>Dermal rabbit</p> <p>No toxicologically significant effects were found.</p> <p>Oral dog</p> <p>Abnormal decrease in number of red blood cells</p> <p>Oral rat</p> <p>No adverse effect has been observed in chronic toxicity tests.</p>
Carcinogenicity	:	Animal testing did not show any carcinogenic effects.
Mutagenicity	:	<p>Did not cause genetic damage in animals.</p> <p>Tests on bacterial or mammalian cell cultures did not show mutagenic effects.</p>
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.
Thifensulfuron methyl Repeated dose toxicity	:	<p>The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.</p> <p>Oral - feed</p>



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multiple species

Reduced body weight gain

- Carcinogenicity : Animal testing did not show any carcinogenic effects.
- Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Did not cause genetic damage in animals.
- Reproductive toxicity : Animal testing showed no reproductive toxicity.
- Teratogenicity : Did not show teratogenic effects in animal experiments.
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.

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.

SECTION 12. ECOLOGICAL INFORMATION

- Aquatic Toxicity
Chlorimuron ethyl
96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 1,000 mg/l


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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

Thifensulfuron methyl

96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 100 mg/l
 14 d EC50 : Lemna minor (duckweed) 0.0013 mg/l
 48 h EC50 : Daphnia magna (Water flea) 470 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 or night.

SECTION 14. TRANSPORT INFORMATION

IATA_C UN number : 3077


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

Not regulated in transportation by DOT/IMO/IATA.

SECTION 15. REGULATORY INFORMATION

SARA 313 Regulated Chemical(s)	: 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.	: 352-648 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 , Sucrose , 1,2-Benzisothiazol-3(2H)-one 1,1-dioxide

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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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