

**DuPont™ Cimarron® Plus Herbicide**

Version 2.0

Revision Date 06/07/2013

Ref. 130000029442

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : DuPont™ Cimarron® Plus Herbicide
Tradename/Synonym : DPX-MGU61
B12163560
METSULFURON METHYL: (Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]-amino]sulfonyl]benzoate)
CHLORSULFURON: (2-Chloro-N-[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)aminocarbonyl]benzenesulfonamide)

MSDS Number : 130000029442

Product Use : Herbicide

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Caution

Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin . Avoid contact with skin, eyes and clothing. Avoid breathing dust or spray mist. Remove and wash contaminated clothing before re-use. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Potential Health Effects

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

Skin

Chlorsulfuron : May irritate skin.

Eyes

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

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Metsulfuron methyl	74223-64-6	48 %
Chlorsulfuron	64902-72-3	15 %
Other Ingredients		37 %

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** : 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.

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SECTION 5. FIREFIGHTING 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.
- 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.


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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 : Ensure adequate ventilation. 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.

Personal protective equipment

Hand protection : Material: Protective gloves

Eye protection : Wear protective eyewear to prevent contact with this substance.

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

Metsulfuron methyl


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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.

* 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
Color	: light brown
Odor	: slight, acrid
pH	: 4.7
Bulk density	: 0.656 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.
Hazardous reactions	: Polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

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Inhalation 4 h LC50 : > 5.3 mg/l , rat

Dermal LD50 : > 2,000 mg/kg , rabbit

Oral LD50 : > 5,000 mg/kg , rat

Skin irritation : slight irritation, rat

Eye irritation : slight irritation, rabbit

Sensitisation : Animal test did not cause sensitization by skin contact., guinea pig

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.

Chlorsulfuron

Repeated dose toxicity : The following effects occurred at levels of exposure that significantly



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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.

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.
Reduced embryo-foetal viability


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SECTION 12. ECOLOGICAL INFORMATION
Aquatic Toxicity
Metsulfuron methyl

96 h LC50	:	Oncorhynchus mykiss (rainbow trout) > 150 mg/l
96 h LC50	:	Lepomis macrochirus (Bluegill sunfish) > 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

Chlorsulfuron

96 h LC50	:	Oncorhynchus mykiss (rainbow trout) > 122 mg/l
120 h EbC50	:	Pseudokirchneriella subcapitata (green algae) 0.05 mg/l
14 d EC50	:	Lemna gibba (duckweed) 0.00035 mg/l
48 h EC50	:	Daphnia magna (Water flea) > 112 mg/l
96 h LC50	:	Americamysis bahia (mysid shrimp) 89 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. 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:


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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, Chlorsulfuron)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9MI
IMDG	UN number	: 3077
	Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metsulfuron methyl, Chlorsulfuron)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9
	Marine pollutant	: yes (Metsulfuron methyl, Chlorsulfuron)

Not regulated as a hazardous material by DOT.

SECTION 15. REGULATORY INFORMATION

SARA 313 Regulated Chemical(s)	: Chlorsulfuron
Title III hazard classification	: Acute Health Hazard: Yes Chronic Health Hazard: No Fire: No Reactivity/Physical hazard: No Pressure: No



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- EPA Reg. No. : 352-670
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 birth defects or other reproductive harm.
- 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): Sucrose , Trisodium orthophosphate

SECTION 16. OTHER INFORMATION

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

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