

**DuPont™ Oustar® Herbicide**

Version 2.0

Revision Date 10/31/2011

Ref. 130000029168

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™ Oustar® Herbicide
Tradename/Synonym : Oustar WG Blend
DPX-GH427 WG Blend
B11147035
HEXAZINONE [3-cyclohexyl-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4(1H,3H)-dione]
SULFOMETURON METHYL {Methyl 2-[[[(4,6-dimethyl-2-pyrimidinyl)amino]-carbonyl]amino] sulfonyl]benzoate}

MSDS Number : 130000029168

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

DANGER!

Causes eye damage. Causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing. Wash thoroughly with soap and water after handling.

Corrosive

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

Hexazinone : Causes eye irritation. May cause: Tearing, pain, redness, swelling, ulceration, visual impairment, or blindness., May cause irreversible eye damage..

Ingestion

Sulfometuron methyl : Effects due to ingestion may include: Red blood cell destruction which could produce tiredness, rapid heartbeat, dizziness, pale skin, leg cramps, shortness of breath, jaundice (yellow tinge to skin and eyes)

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.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Hexazinone	51235-04-2	63.2 %
Sulfometuron methyl	74222-97-2	11.8 %
Other Ingredients		25 %

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.

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- Inhalation : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.
- Ingestion : Call a physician or poison control centre immediately. 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.
- Notes to physician : Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5. FIREFIGHTING MEASURES

- Fire and Explosion Hazard : Not a fire or explosion hazard.
- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Firefighting Instructions : Wear self-contained breathing apparatus and protective suit. Evacuate personnel and keep upwind of fire. 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. Runoff from fire control may be a pollution hazard. Control Runoff.

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 : Dike spill. Prevent further leakage or spillage. Shovel or sweep up. Dispose of in an approved container.



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Accidental Release Measures : Prevent material from entering sewers, waterways, or low areas.
Follow applicable Federal, State/Provincial and Local laws/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.
- Handling (Physical Aspects) : Avoid dust formation.
- 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 : Use only with 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
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 eyewear
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 eyewear
- Protective measures : Discard clothing and other absorbent materials that have been drenched or


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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. Use this product in accordance with its label.

**Exposure Guidelines
Exposure Limit Values**

Hexazinone

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

Sulfometuron methyl
TLV

	(ACGIH)	5 mg/m3	TWA
AEL *	(DUPONT)	10 mg/m3	8 & 12 hr. TWA Total 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	: tan
pH	: 7
Density	: 35 lb/ft ³
Solubility(ies)	: dispersible

SECTION 10. STABILITY AND REACTIVITY

Stability	: Stable at normal temperatures and storage conditions.
Incompatibility	: None reasonably foreseeable.


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Hazardous reactions : Polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

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Inhalation 4 h LC50 : > 5.2 mg/l , rat

Dermal LD50 : > 5,000 mg/kg , rabbit

Oral LD50 : 2,073 mg/kg , male, rat

Oral LD50 : 1,421 mg/kg , female, rat

Skin irritation : Moderate skin irritation, rabbit

Eye irritation : Irritating to eyes., rat

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

Further information : Information given is based on data on the components and the toxicology of similar products.

Hexazinone

 Repeated dose toxicity : Oral
dog

Increased liver enzyme levels in serum

 Oral
rat

Reduced body weight gain, Organ weight changes, Liver

Carcinogenicity : Overall weight of evidence indicates that the substance is not carcinogenic.

 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.



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- Teratogenicity : Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.
- Sulfometuron methyl
Repeated dose toxicity : The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.
- Oral
dog
Abnormal decrease in number of red blood cells
- Oral
rat
Reduced body weight gain
- Oral
mouse
Reduced body weight gain
- Carcinogenicity : Animal testing did not show any carcinogenic effects.
- Mutagenicity : Animal testing did not show any mutagenic effects.
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
- Reproductive toxicity : Animal testing showed effects on reproduction at levels equal to or above those causing parental toxicity.
- Teratogenicity : Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity


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Hexazinone

96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 320 mg/l

96 h LC50 : Lepomis macrochirus (Bluegill sunfish) > 116 mg/l

120 h ErC50 : Skeletonema costatum (Diatom) 0.022 mg/l

120 h NOEC : Skeletonema costatum (Diatom) 0.0041 mg/l

48 h EC50 : Daphnia magna (Water flea) 152 mg/l

Sulfometuron methyl

96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 148 mg/l

120 h EC50 : Pseudokirchneriella subcapitata (green algae) 0.0046 mg/l

48 h EC50 : Daphnia magna (Water flea) > 150 mg/l

Environmental Fate

Hexazinone

Biodegradability : According to the results of tests of biodegradability this product is not readily biodegradable.

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

Not regulated as a hazardous material by DOT.

SECTION 15. REGULATORY INFORMATION

SARA 313 Regulated Chemical(s) : Hexazinone

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

EPA Reg. No. : 352-603
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): Saccharin

SECTION 16. OTHER INFORMATION

	NFPA	HMIS
Health :	2	2
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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