The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

DuPont                          Page   1
Material Safety Data Sheet

"DuPont" "WESTAR" HERBICIDE
M0000497                  Revised 13-MAR-2007

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

# Material Identification

"WESTAR" is a registered trademark of DuPont.

"DuPont" is a trademark of DuPont.

# Tradenames and Synonyms

DPX-GJP87
VELPAR DF (HEXAZINONE) COMPONENT
OUST XP (SULFOMETURON METHYL) COMPONENT
DuPont VOR 111
VOR 111

Company Identification

MANUFACTURER/DISTRIBUTOR
DuPont
1007 Market Street
Wilmington, DE 19898

PHONE NUMBERS
Product Information : 1-800-441-7515 (outside the U.S. 302-774-1000)
Transport Emergency : CHEMTREC 1-800-424-9300(outside U.S. 703-527-3887)
Medical Emergency    : 1-800-441-3637 (outside the U.S. 302-774-1000)

COMPOSITION/INFORMATION ON INGREDIENTS

# Components

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEXAZINONE</td>
<td>51235-04-2</td>
<td>68.6</td>
</tr>
<tr>
<td>[3-cyclohexyl-6-dimethylamino)-1-methyl-1,3,5-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>triazine-2,4(1H,3H)-dione]</td>
<td></td>
<td></td>
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<tr>
<td>SULFOMETURON METHYL</td>
<td>74222-97-2</td>
<td>6.5</td>
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<tr>
<td>{methyl 2-[[[[4,6-dimethyl-2-pyrimidinyl)=</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INERT INGREDIENTS</td>
<td></td>
<td>24.9</td>
</tr>
</tbody>
</table>

* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.
HAZARDS IDENTIFICATION

Emergency Overview

DANGER! CAUSES EYE DAMAGE. Corrosive, causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing. Avoid contact with skin. Wash thoroughly with soap and water after handling.

Potential Health Effects

Based on animal data from a component, eye contact with Westar may cause corneal opacity or clouding of the eye.

Based on animal data, skin contact with Westar may cause skin irritation with discomfort or rash.

Based on component data, ingestion of high doses of Westar may lead to red blood cell destruction; or abnormal liver function as detected by laboratory tests.

Carcinogenicity Information

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

FIRST AID MEASURES

First Aid

IF IN EYES: 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.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF INHALED: No specific intervention is indicated, as the compound is not likely to be hazardous by inhalation. Consult a physician if necessary.

Have the product container or label with you when calling a
FIRE FIGHTING MEASURES

Flammable Properties

Not a fire or explosion hazard.

Extinguishing Media

Water Spray, Foam, Dry Chemical, CO2.

Fire Fighting Instructions

Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment. Use water spray. Runoff from fire control may be a pollution hazard.

If area is exposed to fire and conditions permit, let fire burn itself out. Burning chemicals may produce by-products more toxic than the original material. If product is on fire, wear self-contained breathing apparatus and full protective equipment. Use water spray. Control runoff.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Emergency Response – Chemical resistant coveralls, waterproof gloves, waterproof boots and face/eye protection. If dusting occurs, use NIOSH approved respirator protection.

Initial Containment

Dike spill. Prevent material from entering sewers, waterways, or low areas.

Follow applicable Federal, state/provincial and local laws/regulations.
Spill Clean Up

Shovel or sweep up.

HANDLING AND STORAGE

Handling (Personnel)

USER SHOULD: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Handling (Physical Aspects)

Avoid dust generation. Keep away from heat, sparks and flames.

Storage

Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a cool, dry place.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use only with adequate ventilation. Keep container tightly closed.

Personal Protective Equipment

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.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product’s concentrate. Do not reuse them. Follow manufacturer’s instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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.
Exposure Guidelines

Applicable Exposure Limits

**HEXAZINONE**
- PEL (OSHA): None Established
- TLV (ACGIH): None Established
- AEL * (DuPont): 10 mg/m³, 8 Hr. TWA

**SULFOMETURON METHYL**
- PEL (OSHA): None Established
- TLV (ACGIH): 5 mg/m³, 8 Hr. TWA, A4
- 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.*

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**PHYSICAL AND CHEMICAL PROPERTIES**

# Physical Data

- Odor: Acrid (slight)
- Form: Solid granule
- Color: Off-white
- pH: 7.1
- Density: 0.59 g/mL
- Solubility in Water: Dispersible

**STABILITY AND REACTIVITY**

**Chemical Stability**

Stable at normal temperatures and storage conditions.

**Incompatibility with Other Materials**

Incompatible or can react with strong bases.

**Decomposition**

Decomposition will not occur.

**Polymerization**

Polymerization will not occur.
# Animal Data

Velpar DF
- **Oral LD$_{50}$**: 1310 mg/kg in rats
- **Dermal LD$_{50}$**: > 5000 mg/kg in rabbits
- **Inhalation 4-hour LC$_{50}$**: 5.2 mg/L

Velpar DF is a skin irritant, is corrosive to the eye, but is not a skin sensitizer in animals.

**HEXAZINONE**

Repeated skin applications indicated no irritation or systemic activity.

Repeated dosing by ingestion of excessive dietary levels of Hexazinone resulted in weight loss, alterations in liver weights, alterations in blood chemical measurements, and alterations in enzyme activities. No evidence of pathological organ damage was observed. Long-term dosing produced decreased weight gain, alterations in hematology, clinical chemistry, and blood enzyme levels, increased liver weights in some species, and pathological liver changes.

Animal data showed that chronic, excessive dietary exposure to Hexazinone produced a slight, equivocal increase in liver tumors in female mice.

Animal data show developmental effects only at exposure levels producing other toxic effects in the adult animal. Animal testing indicates Hexazinone does not have reproductive effects. The weight of evidence from a battery of cell culture and laboratory animal tests indicates Hexazinone does not cause genetic toxicity.

Oust XP
- **Inhalation 4 hour LC$_{50}$**: > 5.3 mg/L in rats (Very low toxicity by inhalation)
- **Skin absorption LD$_{50}$**: > 5000 mg/kg in rabbits (Slightly to moderately toxic by contact)
- **Oral LD$_{50}$**: > 5000 mg/kg in rats (Very low toxicity by ingestion)

Oust XP is a slight to mild skin irritant, and a mild eye irritant, but is not a skin sensitizer in animals.

Single inhalation exposure with Oust XP (Sulfometuron Methyl 75%) in rats caused slight to moderate body weight loss, nasal and ocular discharge, and other nonspecific effects.

Single high oral doses of Oust XP (Sulfometuron Methyl 75%) produced no clinical signs of toxicity and no lesions were observed during pathological examination of tissue.
Repeated oral studies with the active ingredient, Sulfometuron Methyl, caused decreased body weight gain, liver changes, red blood cell hemolysis, and altered white blood cell counts. Long-term exposure caused mild hemolytic anemia, decreased body weight, alteration of clinical chemical parameters, and changes in the bile duct.

Animal testing indicates that the active ingredient, Sulfometuron Methyl, does not have carcinogenic effects. In a two generation rat reproduction study with the active ingredient, Sulfometuron Methyl, decreased numbers of pups were observed at the 5000 ppm level, a dose that was also maternally toxic. No reproductive effects were observed at 500 ppm.

Sulfometuron methyl did not produce developmental toxicity when tested in animals. Sulfometuron methyl did not produce genetic damage in bacterial or mammalian cell cultures.

# Ecotoxicological Information

AQUATIC TOXICITY:
HEXAZINONE
96 hour LC50 - Fathead minnows: 274 mg/L.
96 hour LC50 - Bluegill sunfish: > 370 ppm.
96 hour LC50 - Rainbow trout: > 320 ppm.

AVIAN TOXICITY:
HEXAZINONE
LD50 - Bobwhite Quail: 2258 mg/kg.

AQUATIC TOXICITY:
SULFOMETURON METHYL
48 hour NOEC - Daphnia magna: > 150 mg/L.
96 hour LC50 - Rainbow trout: > 148 mg/L.
96 hour LC50 - Bluegill sunfish: > 150 mg/L.

AVIAN TOXICITY:
Acute Dietary LC50 - Mallard Duck: > 5000 ppm.
Acute Dietary LC50 - Bobwhite Quail: > 5620 ppm

DISPOSAL CONSIDERATIONS

Waste Disposal
Do not contaminate water, food, or feed by disposal. Waste resulting from the use of this product may be disposed of on the site or at an approved waste disposal facility.

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 disposing of equipment washwaters.

The active ingredient, hexazinone, in this product is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

# Container Disposal

For Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned stay out of smoke.

For Fiber Sacks: Completely empty fiber sack by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into manufacturing or application equipment. Then dispose of sack in a sanitary landfill or by incineration if allowed by state and local authorities.

For Paper and Plastic Bags: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Container Disposal for Bulk Containers: See product label for instructions.

DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. The container must only be refilled with this pesticide product. Do not transport if container is damaged or leaking.

Disposal of the container must be in compliance with state and local regulations.

TRANSPORTATION INFORMATION

Shipping Information

DOT/IMO
Proper Shipping Name     : Not Regulated
REGULATORY INFORMATION

U.S. Federal Regulations

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute : Yes
Chronic : No
Fire : No
Reactivity : No
Pressure : No

In the United States this product is regulated by the US Environmental Protection Agency under the Federal Insecticide, Fungicide and Rodenticide Act. It is a violation of federal law to use this product in a manner inconsistent with its labeling.

EPA Reg. No. 352-626

OTHER INFORMATION

# NFPA, NPCA-HMIS

NPCA-HMIS Rating
Health : 2
Flammability : 1
Reactivity : 0

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS : DuPont Crop Protection
Address : Wilmington, DE 19898
Telephone : 1-888-638-7668

# Indicates updated section.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS