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

DuPont "CIMARRON" MAX
M0000471 Revised 15-JUN-2006

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

"CIMARRON" is a registered trademark of DuPont.

"DuPont" is a trademark of DuPont.

Grade : FORMULATION

Tradenames and Synonyms

"CIMARRON" MAX
METSULFURON METHYL

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

Material	CAS Number	%
METSULFURON METHYL (METHYL 2-[[[[(4-METHOXY-6-METHYL-1,3,5-TRIAZIN-2-YL)AMINO]CARBONYL]AMINO]SULFONYL] BENZOATE)	74223-64-6	0.75
DIMETHYLAMINE SALT of DICAMBA (3,6-DICHLORO-O-ANISIC ACID)		12.25
DIMETHYLAMINE SALT of 2,4-D		35.25
*2,4-D (Dichlorophenoxyacetic acid)	94-75-7	
INERT INGREDIENTS		51.75

* 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 or absorbed through skin. Do not get in eyes or on clothing. Wash thoroughly with soap and water after handling.

Potential Health Effects

Eye contact with Cimarron Max may cause eye corrosion or ulceration; blindness may result. Direct eye contact with the aerosol may cause eye irritation with tearing, pain or blurred vision.

Skin contact with Cimarron Max may cause skin irritation with itching, redness or swelling. Skin permeation may occur in amounts capable of producing the effects of systemic toxicity.

Ingestion of Cimarron Max may cause irritation of the digestive tract with pain or diarrhea. Ingestion of large amounts may cause liver or kidney effects with altered results on blood tests.

Inhalation of aerosols or sprays of Cimarron Max may cause irritation of the upper respiratory passages with coughing and discomfort. Prolonged inhalation or inhalation of large amounts may cause difficulty breathing or shortness of breath; nervous system effects such as weakness, fatigue or loss of muscle control.

Carcinogenicity Information

The following components are listed by IARC, NTP, OSHA or ACGIH as carcinogens.

Material	IARC	NTP	OSHA	ACGIH
2,4-D (Dichlorophenoxyacetic acid)	2B			

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.

(FIRST AID MEASURES - Continued)

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

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-441-3637 for medical emergencies involving this product.

Notes to Physicians

Probable mucosal damage may contraindicate the use of gastric lavage.

FIRE FIGHTING MEASURES

Flammable Properties

Not a fire or explosion hazard.

Like most organic powders or crystals, under severe dusting conditions, this material may form explosive mixtures in air.

Extinguishing Media

Water Spray, Foam, Dry Chemical, CO2.

Fire Fighting Instructions

Evacuate personnel to a safe area. 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.

(ACCIDENTAL RELEASE MEASURES - Continued)

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)

Avoid breathing vapor or mist. Avoid breathing dust.

USERS SHOULD: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE 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, 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.

When handlers use enclosed cabs or aircraft in a manner that meets the requirements listed in 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.

(EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued)

Personal Protective Equipment

Some materials that are chemical resistant to this product are listed below. If you want more options follow the instructions for Category A on the EPA chemical resistance category selection chart.

Applicators and other handlers must wear:
- Long-sleeved shirt and long pants.
- Chemical Resistant Gloves Category A (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber) all equal to or greater than 14 mils.
- Shoes plus socks.
- Protective eye wear

CIMARRON MAX PART B Containers greater than 1 gallon but less than 5 gallons: Mixers and loaders who do not use a mechanical system (probe and pump) to transfer the contents of the CIMARRON MAX PART B container must wear coveralls or a chemical-resistant apron in addition to the other required PPE.

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 and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE from other laundry.

CIMARRON MAX PART B Containers 5 gallons or more: Do not open pour product from this container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Workers 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.

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
- Shoes Plus Socks
- Chemical Resistant Gloves in Category A (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber) all equal to or greater than 14 mils.
- Protective eye wear

(EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued)

Exposure Guidelines

Applicable Exposure Limits
METSULFURON METHYL
PEL (OSHA) : None Established
TLV (ACGIH) : None Established
AEL * (DuPont) : 10 mg/m3, 8 & 12 Hr. TWA

2,4-D (Dichlorophenoxyacetic acid)
PEL (OSHA) : 10 mg/m3, 8 Hr. TWA
TLV (ACGIH) : 10 mg/m3, 8 Hr. TWA, A4
AEL * (DuPont) : None Established

* 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.

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

CIMARRON MAX PART A/METSULFURON METHYL

Solubility in Water : Dispersible
Odor : Slight
Form : Solid granule
Color : Light brown
Specific Gravity : 1.47 @ 25C (77F)
Bulk Density (Tap Bulk Density) : 0.64 - 74 mg/L

CIMARRON MAX PART B

Solubility in Water : Miscible
Odor : Amine
Form : Liquid
Color : Amber
Specific Gravity :9.72 lb/gal

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials

None reasonably foreseeable.

Decomposition

Decomposition will not occur.

(STABILITY AND REACTIVITY - Continued)

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

CIMARRON MAX PART A:

Oral LD50:	> 5000 mg/kg in rats (Very low toxicity)
Skin LD50:	> 2000 mg/kg in rabbits (Slight to moderate toxicity)

CIMARRON MAX PART A is a slight eye irritant, but is not a skin irritant or skin sensitizer in animal tests.

Metsulfuron Methyl

Inhalation LC50, 4 hr:	> 5.3 mg/L in rats (Very low toxicity)

Single exposures of animals to Metsulfuron Methyl by inhalation caused body weight loss and other nonspecific effects.

Repeated applications of Metsulfuron Methyl to the skin of rabbits caused skin irritation, but no other changes were observed.

Repeated oral doses of Metsulfuron Methyl produced decreased body weight gain and decreased liver weights when compared to the control group. Long term administration caused body weight loss.

Animal testing indicates that Metsulfuron Methyl does not have carcinogenic, developmental, or reproductive effects. There is a report indicating that Metsulfuron Methyl produced genetic damage in a mammalian cell culture test; however, other tests with Metsulfuron Methyl in bacterial and mammalian cell cultures and in animals did not produce genetic damage. The weight of evidence suggests that Metsulfuron Methyl does not cause genetic damage.

CIMARRON MAX PART B

Oral LD50:	1497 mg/kg in rats
Dermal LD50:	> 2000 mg/kg in rabbits
Inhalation 4 hour LC50:	> 2.07 mg/L in rats

Cimarron Max Part B is a skin irritant, and an eye corrosive substance, but is not a skin sensitizer in animal tests.

No animal data are available to define the carcinogenicity, developmental, reproductive or mutagenic hazards of Cimarron

(TOXICOLOGICAL INFORMATION - Continued)

Max Part B.

(2,4-D)
Repeated ingestion of 2,4-D by rats caused decreased growth rate, clinical chemical changes, and kidney effects. In a different study in rats, effects included increased kidney and thyroid weights, clinical chemical changes and histopathological changes in the kidneys. Repeated ingestion of 2,4-D by mice caused kidney effects, and increased kidney, pituitary and adrenal weights. Several long-term ingestion studies in rats, dogs, or mice resulted in no significant toxicological effects. In other long-term studies in rats and mice, 2,4-D caused kidney effects in mice; and decreased body weights, kidney effects, hematological changes and thyroid/parathyroid changes in rats.

Several chronic feeding studies with 2,4-D resulted in no carcinogenicity in rats, dogs and mice. Although in one study there were brain tumors at 45 mg/kg in male rats, a subsequent study failed to duplicate these lesions at doses up to and including 150 mg/kg/day.

Developmental, reproductive and mutagenicity studies with 2,4-D have produced both positive and negative results.

ECOLOGICAL INFORMATION

Ecotoxicological Information

CIMARRON MAX PART A
AQUATIC TOXICITY:
96 hour LC50 - Rainbow trout: > 150 ppm.
96 hour LC50 - Bluegill sunfish: > 150 ppm.

AVIAN TOXICITY:
LD50 - Mallard Duck: > 2510 mg/kg.
LC50 - Bobwhite Quail: > 5620 mg/kg

CIMARRON MAX PART B
AQUATIC TOXICITY:
96 hour LC50 - Bluegill sunfish: > 1000 mg/L.
96 hour LC50 - Rainbow trout: > 1000 mg/L.
48 hour EC50 - Daphnia magna: > 1800 mg/L

DISPOSAL CONSIDERATIONS

Waste Disposal

Pesticide wastes are toxic. Triple rinse pesticide from containers and use rinsates in the pesticide application. Improper disposal of excess pesticide, spray mixture, or rinsate, is a violation of Federal Law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

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

ENVIRONMENTAL HAZARDS
This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and non-target plants. 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. Apply this product only as directed on label.

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.

TRANSPORTATION INFORMATION

Shipping Information

DOT/IMO
Proper Shipping Name: Not Regulated *

* If 100 lbs. 2,4-D Salt or more in a single package:
Proper Shipping Name : Environmentally Hazardous Substance, Liquid, n.o.s., 9, UN 3082, III, RQ, (2,4-D Salt)

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. 352-615

OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating
Health : 1
Flammability : 1
Reactivity : 0

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

Personal Protection rating to be supplied by user depending on use conditions.

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