

\_\_\_\_\_ "DuPont" "CURZATE" 60DF FUNGICIDE Revised 5-MAR-2010 M0000401 \_\_\_\_\_ Substance ID :130000013486 \_\_\_\_\_ CHEMICAL PRODUCT/COMPANY IDENTIFICATION \_\_\_\_\_ Material Identification CURZATE is a registered trademark of DuPont. "DuPont" is a trademark of DuPont. Corporate MSDS Number : DU007343 Tradenames and Synonyms Curzate 60DF/WG DPX-T3217 60DF DPX-T3217 60WG CURZATE B10923139 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 % 57966-95-7 60 CYMOXANIL 2-Cyano-N-[(ethylamino)carbonyl]-2-(methyloxyimino)acetamide INERT INGREDIENTS 40 \_\_\_\_\_ HAZARDS IDENTIFICATION \_\_\_\_\_ Emergency Overview

Page 1

WARNING! MAY BE FATAL IF SWALLOWED. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco.

Potential Health Effects

Based on animal data, skin contact with Curzate 60DF may cause temporary reversible irritation with itching, redness, swelling or rash.

Based on animal data, eye contact with Curzate 60DF may cause temporary reversible eye irritation with tearing, pain or blurred vision.

Based on animal data from the active ingredient, ingestion of Curzate 60DF may cause temporary central nervous system depression with dizziness, confusion, incoordination, drowsiness or unconsciousness, changes in hematology measurements, pathological changes in the liver, and weight loss.

Based on animal data, inhalation of Curzate 60DF may cause irritation of the respiratory tract with sneezing or runny nose.

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 SWALLOWED: Call 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.

IF INHALED: Inhalation toxicity is not expected to occur, but contact a physician if symptoms are noted.

IF ON SKIN OR CLOTHING: Skin irritation is expected to be minimal to nonexistent, but contact a physician if irritation persists.

IF IN EYES: Eye irritation is expected to be minimal to nonexistent, but contact a physician if irritation persists.

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 emergency medical

treatment information. \_\_\_\_\_ FIRE FIGHTING MEASURES \_\_\_\_\_ Flammable Properties The material poses no explosion hazard in granular form. Extinguishing Media Water Spray, Foam, Dry Chemical, CO2. Fire Fighting Instructions Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment. 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 \_\_\_\_\_ Safequards (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 Remove source of heat, sparks, flame, impact, friction or electricity. Follow applicable Federal, State/Provincial and Local laws/ regulations. Prevent material from entering sewers, waterways, or low areas. Spill Clean Up Shovel or sweep up. Dispose of in an approved container. \_\_\_\_\_

HANDLING AND STORAGE \_\_\_\_\_ Handling (Personnel) USERS SHOULD: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove personal protective equipment immediately after handling this product. Do not breathe dust. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Do not store or consume food, drink or use tobacco in areas where they may become contaminated with this material. Storage Keep container tightly closed when not in use. Store product in original container only, away from other pesticides, fertilizer, food or feed. \_\_\_\_\_ 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 the Worker Protection Standard (WPS) for agricultural pesticides [40CFR part 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. Personal Protective Equipment Applicators and other handlers must wear: Long-sleeved shirt and long pants. Shoes plus socks. 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 over long-sleeved shirt and long pants.

Chemical-resistant gloves made of any waterproof

material such as polyethylene or polyvinyl chloride. Shoes plus socks. During aerial application, human flaggers must be in enclosed cabs. Always follow the label instructions when handling this product. Exposure Guidelines Applicable Exposure Limits CYMOXANIL PEL(OSHA): None EstablishedTLV(ACGIH): None EstablishedAEL \*(DuPont): 2 mg/m3, 8 & 12 Hr. TWA \* 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 Solubility in Water : Dispersible Odor : Bland (very faint) : Solid, granule : Brown Form Color Bulk Density (Loose) : 39.1 lb/cu ft \_\_\_\_\_ STABILITY AND REACTIVITY \_\_\_\_\_ Chemical Stability Stable at normal temperatures and storage conditions. Incompatibility with Other Materials None reasonably foreseeable. Polymerization Polymerization will not occur. \_\_\_\_\_ TOXICOLOGICAL INFORMATION \_\_\_\_\_ Animal Data Curzate 60DF Oral LD50: 433 mg/kg in rats

Dermal LD50:	>	(Moderately toxic) 5000 mg/kg in rats
Inhalation 4 hour LC50:	>	<pre>(Very low to Slightly toxic) 5.0 mg/L in rats (Very low toxicity)</pre>

Curzate 60DF is a reversible slight to moderate skin irritant, and a reversible slight eye irritant, but is not a skin sensitizer in animals.

#### CYMOXANIL

Overexposure to Cymoxanil by skin contact did not produce irritation in guinea pigs. In a repeated dermal exposure test with rats, the NOEL was 1000 mg/kg.

Effects of single exposure by ingestion of Cymoxanil included weight loss, altered righting reflexes, weakness, labored breathing, lethargy, incoordination, and nasal discharge. Repeated oral exposure caused increased liver weight, reduced weight gain, and testicular and epididymal histological changes. Other effects included diarrhea, altered hematology, lethargy, and increased mortality.

Long term exposure by ingestion of Cymoxanil to high concentrations caused body and organ weight decreases, pathological changes of the liver, gastrointestinal tract, lungs, eyes, nerves, testes, sperm, bone marrow, spleen and thymus, altered hematology, weakness and increased mortality.

Effects of single exposure by inhalation to high concentrations of Cymoxanil included diarrhea, altered respiratory rate, nasal and ocular discharge, changes in posture, decreased motor activity, tremors and lethargy.

In animal testing Cymoxanil has not caused carcinogenicity. Animal testing show developmental effects only at similar exposure levels producing other toxic effects in the adult animal. Tests have shown Cymoxanil to cause reproductive toxicity in animals, however, only at levels producing toxic effects in the adult animal. Cymoxanil has not produced genetic damage in bacterial cultures. In mammalian cell cultures Cymoxanil has caused genetic toxicity. It has not produced genetic damage in tests on animals. In animal testing, Cymoxanil has not caused permanent genetic damage in reproductive cells of mammals (has not produced heritable genetic damage).

\_\_\_\_\_

ECOLOGICAL INFORMATION

Ecotoxicological Information

AQUATIC TOXICITY: CYMOXANIL 96 hour LC50 - Rainbow trout: 61 mg/L.

96 hour LC50 - Bluegill sunfish: 29 mg/L. 48 hour EC50 - Daphnia magna: 27 mg/L. AVIAN TOXICITY: CYMOXANIL LD50 - Bobwhite Quail: > 2250 mg/kg. LD50 - Mallard Duck: > 2250 mg/kg. LC50 - Bobwhite Quail: > 5620 ppm. LC50 - Mallard Duck: > 5620 ppm \_\_\_\_\_ DISPOSAL CONSIDERATIONS \_\_\_\_\_ Waste Disposal Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. [EOB] Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, state/provincial, and local regulations. ENVIRONMENTAL HAZARDS This product is toxic to fish and aquatic invertebrates. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. 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. Container Disposal Container Refilling and Disposal: Refer to the product label for instructions. Refillable Containers: Refill containers with this pesticide product only. Do not reuse the container for any other purpose. Do not transport if the container is damaged or leaking. In the event of a major spill, fire or other emergency, contact DuPont at 1-800-441-3637, day or night. TRANSPORTATION INFORMATION \_\_\_\_\_ # Shipping Information DOT: Not regulated as hazardous material by DOT. IMDG:

UN/NA No. : UN 3077 Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (Cymoxanil) Hazard Class : 9 Packing Group : III Marine Pollutant : Yes (Cymoxanil) IATA: : UN 3077 UN/NA No. Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (Cymoxanil) Packing Group : T : III \_\_\_\_\_ REGULATORY INFORMATION \_\_\_\_\_ U.S. Federal Regulations TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312 Acute : Yes Chronic : Yes : No Fire Reactivity : No Pressure : No EPA Reg. No.: 352-592 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. \_\_\_\_\_ OTHER INFORMATION \_\_\_\_\_ 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 Wilmington DE 19898 (Continued) Telephone : 1-888-638-7668

# Indicates updated section.