

DuPont™ Curzate® 60DF Fungicide

Version 3.0

Issue Date : 03/18/2019
Revision Date : 02/07/2019

Ref. 130000013486

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™ Curzate® 60DF Fungicide
Tradename/Synonym : B10923139
DPX-T3217 60WG

Product Use : Fungicide

Restrictions on use : Do not use product for anything outside of the above specified uses.

Manufacturer/Supplier : DuPont
974 Centre Road
Wilmington, DE 19805, USA

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 : +1-800-424-9300 (outside the U.S. +1-703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION**Product hazard category**

Acute toxicity (Oral)	Category 4
Skin sensitisation	Category 1
Specific target organ toxicity - repeated exposure	Category 2

Label content

Pictogram :



Signal word : Warning

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Hazardous warnings : Harmful if swallowed.
May cause an allergic skin reaction.
May cause damage to organs through prolonged or repeated exposure.
(thymus)

Hazardous prevention measures : Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
IF ON SKIN: Wash with plenty of soap and water.
Get medical advice/ attention if you feel unwell.
If skin irritation or rash occurs: Get medical advice/ attention.
Wash contaminated clothing before reuse.
Dispose of contents/ container to an approved waste disposal plant.

Other hazards

Information presented in Section 2 conforms to the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard of 2012. See Section 15 for applicable information conforming to the requirements of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as required by the US Environmental Protection Agency (EPA), or by state Regulatory Agencies.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 30.8798 %

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Cymoxanil	57966-95-7	60 %
Modified Aromatic Sulfonate Salt		1 - 5 %
Fumed silica, crystalline-free	112945-52-5	1 - 5 %

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Other Ingredients		30 - 38 %
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The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

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.

Information presented in Section 4 conforms to the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard of 2012. See Section 15 for applicable information conforming to the requirements of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as required by the US Environmental Protection Agency (EPA), or by state Regulatory Agencies.

Inhalation : Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

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.

Ingestion : If swallowed, call a poison control centre or doctor 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.

Most important symptoms/effects, acute and delayed : No applicable data available.

Protection of first-aiders : No applicable data available.

Notes to physician : No applicable data available.

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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)
- Specific hazards : No applicable data available.
- Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.
- Further information : Evacuate personnel and keep upwind of fire. Control Runoff. (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.
- Environmental precautions : Prevent material from entering sewers, waterways, or low areas.
- Spill Cleanup : Sweep up and shovel into suitable containers for disposal.
- Accidental Release Measures : 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 personal

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protective equipment immediately after handling this product.

Handling (Physical Aspects) : Keep away from heat and sources of ignition.

Dust explosion class : No applicable data available.

Storage : Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Keep container closed when not in use. Store in original container. Keep out of the reach of children.

Storage period : No applicable data available.

Storage temperature : No applicable data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls : 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. Information presented in Section 8 conforms to the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard of 2012. See Section 15 for applicable information conforming to the requirements of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as required by the US Environmental Protection Agency (EPA), or by state Regulatory Agencies.

Personal protective equipment

Respiratory protection : Where there is potential for airborne exposures in excess of applicable limits, wear approved respiratory protection with dust/mist cartridge. Provide adequate ventilation.

Hand protection : Additional protection: See skin and body protection

Skin and body protection : Applicators and other handlers must wear:
Long sleeved shirt and long pants
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 worn over long-sleeved shirt and long pants
Chemical resistant gloves made of any waterproof material
Shoes plus socks


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Protective measures : Use this product in accordance with its label. Discard clothing and other absorbent materials that have been drenched or 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. During aerial application, human flaggers must be in enclosed cabs.

Exposure Guidelines
 Exposure Limit Values

Cymoxanil			
AEL *	(DuPont)	2 mg/m3	15 minute TWA

Modified Aromatic Sulfonate Salt			
No applicable data available.			

Fumed silica, crystalline-free			
PEL (Permissible Exposure Limit)	(OSHA)	20 Million particles per cubic foot	TWA
PEL (Permissible Exposure Limit)	(OSHA)	80 mg/m3 / %SiO2	TWA
REL	(NIOSH)	6 mg/m3	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
AEL *	(DuPont)	1 mg/m3	8 & 12 hr. TWA

Modified Aromatic Sulfonate Salt			
No applicable data available.			

Fumaric acid			
No applicable data available.			

* 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

Appearance
 Physical state : solid
 Form : solid, granules

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Color	: brown
Odor	: very faint
Odor threshold	: No applicable data available.
pH	: No applicable data available.
Melting point/range	: No applicable data available.
Boiling point/boiling range	: No applicable data available.
Flash point	: No applicable data available.
Evaporation rate	: No applicable data available.
Flammability (solid, gas)	: No applicable data available.
Upper explosion limit	: No applicable data available.
Lower explosion limit	: No applicable data available.
Vapour Pressure	: No applicable data available.
Vapour density	: No applicable data available.
Specific gravity (Relative density)	: No applicable data available.
Water solubility	: dispersible
Solubility(ies)	: No applicable data available.
Partition coefficient: n-octanol/water	: No applicable data available.
Auto-ignition temperature	: No applicable data available.
Decomposition temperature	: No applicable data available.
Viscosity, kinematic	: No applicable data available.
Viscosity, dynamic	: No applicable data available.

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SECTION 10. STABILITY AND REACTIVITY

Reactivity : No applicable data available.
Chemical stability : Stable at normal temperatures and storage conditions.

Possibility of hazardous reactions : Polymerization will not occur.
Conditions to avoid : None reasonably foreseeable.

Incompatible materials : No materials to be especially mentioned.

Hazardous decomposition products : No applicable data available.

SECTION 11. TOXICOLOGICAL INFORMATION

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Inhalation 4 h LC50 : > 5.0 mg/l , Rat

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

Oral LD50 : 433 mg/kg , Rat

Skin irritation : slight irritation, Rabbit
Minimal effects that do not meet the threshold for classification.

Eye irritation : slight irritation, Rabbit
Minimal effects that do not meet the threshold for classification.

Sensitisation : May cause sensitisation by skin contact., Guinea pig

Further information : Information presented in this Section conforms to the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard of 2012. See Section 15 for applicable information conforming to the requirements of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as required by the US Environmental Protection Agency (EPA), or by state Regulatory Agencies.

Cymoxanil
Repeated dose toxicity : The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

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Oral
multiple species
-

Target Organs: Blood, thymus
altered blood chemistry, No effect to neurotoxicity.

Oral - feed
Dog
- 90 d
Target Organs: thymus
Thymus effects

- Carcinogenicity : Not classifiable as a human carcinogen.
Did not show carcinogenic effects in animal experiments.
- Mutagenicity : Animal testing did not show any mutagenic effects.
Evidence suggests this substance does not cause genetic damage in cultured bacterial cells.
Tests on mammalian cell cultures showed mutagenic effects.
- Reproductive toxicity : No toxicity to reproduction
- Teratogenicity : Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.
- Fumed silica, crystalline-free
Repeated dose toxicity : Ingestion
Rat
- 90 d
NOAEL: 4,000 mg/kg Method: OECD Test Guideline 408
No toxicologically significant effects were found.
- Skin contact
Rabbit
- 21 d
NOAEL: > 10,000 mg/kg
No toxicologically significant effects were found.
- Mutagenicity : Animal testing did not show any mutagenic effects.
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
- Teratogenicity : Animal testing showed no developmental toxicity.
Information given is based on data obtained from similar substances.

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Carcinogenicity

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

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 12. ECOLOGICAL INFORMATION**Aquatic Toxicity****DuPont™ Curzate® 60DF Fungicide**

- 96 h LC50 : Oncorhynchus mykiss (rainbow trout) 35 mg/l OECD Test Guideline 203
Information source: Internal study report
(Data on the product itself)
- 96 h LC50 : Lepomis macrochirus (Bluegill sunfish) 29 mg/l
- 72 h ErC50 : Pseudokirchneriella subcapitata (green algae) > 10 mg/l OECD Test Guideline 201
Information source: Internal study report
(Data on the product itself)
- 48 h EC50 : Daphnia magna (Water flea) 10.7 mg/l OECD Test Guideline 202
Information source: Internal study report
(Data on the product itself)

Cymoxanil

- 21 d : NOEC Oncorhynchus mykiss (rainbow trout) 0.22 mg/l
- 21 d : NOEC Daphnia magna (Water flea) 0.067 mg/l
Information source: Internal study report

SECTION 13. DISPOSAL CONSIDERATIONS

- Waste disposal methods - Product : 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.

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Waste disposal methods - : Container Refilling and Disposal:
Container Refer to the product label for instructions.
Do not transport if this container is damaged or leaking.

Contaminated packaging : No applicable data available.

SECTION 14. TRANSPORT INFORMATION

IATA_C	UN number	: 3077
	Proper shipping name	: Environmentally hazardous substance, solid, n.o.s. (Cymoxanil)
	Class	: 9
	Packing group	: III
IMDG	Labelling No.	: 9
	UN number	: 3077
	Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cymoxanil)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9

Not regulated by DOT/49 CFR unless shipped in bulk package or by water.

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA special provision A197, and ADR/RID special provision 375.

SECTION 15. REGULATORY INFORMATION

Other regulations : This Safety Data Sheet is for a pesticide product registered by the US Environmental Protection Agency (USEPA) and various state regulatory agencies, and is therefore also subject to certain requirements under US and state pesticide laws, including the Federal Insecticide Fungicide and Rodenticide Act (FIFRA). These requirements differ from the classification criteria and hazard information required by OSHA for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is information determined by USEPA, and various states.

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WARNING!

May be fatal if swallowed. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SARA 311/312 Hazard classification : Acute toxicity (any route of exposure)
Respiratory or skin sensitisation
Specific target organ toxicity (single or repeated exposure)

SARA 313 Regulated Chemical(s) : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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, Sodium sulphate, Fumaric acid

CERCLA Reportable Quantity : Based on the percentage composition of this chemical in the product.:

	Fumaric acid
	Naphthalene

SARA Reportable Quantity : This material does not contain any components with a SARA 302 RQ.

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.

California Prop. 65 : This product can expose you to Naphthalene, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16. OTHER INFORMATION

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Contact person : DuPont Crop Protection, Wilmington, DE, 19805, Phone: 1-888-638-7668

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.