

**DuPont™ Cinch® Herbicide**

Version 3.0

Issue Date : 03/18/2019 Ref. 130000030065
Revision Date : 10/19/2018

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™ Cinch® Herbicide
Tradename/Synonym : DuPont DPX-H1D19 Herbicide
DPX-H1D19

Product Use : Herbicide

Restrictions on use : This product is intended to be used as a pesticide

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 (Inhalation)	Category 4
Serious eye damage/eye irritation	Category 2B
Carcinogenicity	Category 1B
Specific target organ toxicity - single exposure	Category 3
Specific target organ toxicity - repeated exposure	Category 2
Aspiration hazard	Category 1

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Label content

Pictogram :



Signal word : Danger

Hazardous warnings : May be fatal if swallowed and enters airways.
Causes eye irritation.
Harmful if inhaled.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause cancer.
May cause damage to organs through prolonged or repeated exposure.


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Hazardous prevention measures : Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
 Wash skin thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 Use personal protective equipment as required.
 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 IF exposed or concerned: Get medical advice/ attention.
 Do NOT induce vomiting.
 If eye irritation persists: Get medical advice/ attention.
 Store in a well-ventilated place. Keep container tightly closed.
 Store locked up.
 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.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Naphthalene	91-20-3	<=5 %
S-Metolachlor	87392-12-9	82.4 %
Benoxacor	98730-04-2	5 - 10 %
Other Ingredients		2.5 - 7.5 %

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

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SECTION 4. FIRST AID MEASURES

General advice : 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.

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.

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 : Call a poison control center or doctor for treatment advice. 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. Never 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.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray, Dry chemical, Foam, Carbon dioxide (CO₂)

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- 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 : (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 : Soak up with sawdust, sand, oil dry or other absorbent material. Dispose of in an approved container.
If liquid has been spilt in large quantities clean up promptly by scoop or vacuum.
- 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 clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.



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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. Store in original container. Keep tightly closed in a dry, cool and well-ventilated place. 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. Refer to the product label for additional Engineering Controls. 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
 Skin and body protection : Applicators and other handlers must wear:
 Long sleeved shirt and long pants
 Chemical resistant gloves, such as barrier laminate or Viton
 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
 Chemical resistant gloves, such as barrier laminate or Viton
 Shoes plus socks

Protective measures : 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


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Exposure Limit Values

Naphthalene			
Permissible exposure limit:	(OSHA)	10 ppm 50 mg/m3	8 hr. TWA
TLV	(ACGIH)	10 ppm	TWA
TLV	(ACGIH)		Skin
AEL *	(DuPont)	0.1 ppm	8 & 12 hr. TWA

S-Metolachlor			
No applicable data available.			

Benoxacor			
No applicable data available.			

Biological Exposure Indices

Naphthalene			
BEI	(ACGIH)		1-Naphthol, with hydrolysis + 2-Naphthol, with hydrolysis/ Sampling time: End of shift.

* 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 : liquid
 Form : liquid
 Color : dark brown

Odor : petrol-like

Odor threshold : No applicable data available.

pH : 7.2 at 25 °C (77 °F)

Melting point/range : No applicable data available.

Boiling point/boiling range : No applicable data available.

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Flash point : > 200 °F

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.

Vapor pressure : at 25 °C (77 °F)

Vapour density : No applicable data available.

Specific gravity (Relative density) : 1.11 at 20 °C (68 °F)

Water solubility : No applicable data available.

Solubility(ies) : at 25 °C (77 °F)

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.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No hazards to be specially mentioned.

Chemical stability : The product is chemically stable under recommended conditions of storage, use and temperature.
Stable at normal temperatures and storage conditions.

Possibility of hazardous reactions : Polymerization will not occur.

Conditions to avoid : None known.


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Incompatible materials : None known.

Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION
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- Inhalation 4 h LC50 : > 3.8 mg/l , Rat
- Dermal LD50 : > 2,020 mg/kg , Rabbit
- Oral LD50 : 2,149 mg/kg , Rat
- Skin irritation : slight irritation, Rabbit
 No skin irritation, Rabbit
 Minimal effects that do not meet the threshold for classification.
- Eye irritation : Mild eye irritation, Rabbit
- Sensitisation : Did not cause sensitisation on laboratory animals., Guinea pig
- Carcinogenicity : Possible human carcinogen
- 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.
- Naphthalene
 Inhalation : Rat
 An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.
 altered hematology
 eye effects
- Naphthalene
 Repeated dose toxicity : Inhalation
 multiple species



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- 90 d
 vapour
 No toxicological effects warranting significant target organ toxicity classification were seen below the recommended guidance values for classification., eye effects, Liver effects, Kidney effects, Respiratory effects, Red blood cell destruction causing abnormal decrease in number of red blood cells (anaemia), nasal damage

Oral
 Rat
 - 90 dMethod: OECD Test Guideline 408
 No toxicological effects warranting significant target organ toxicity classification were seen below the recommended guidance values for classification., Central nervous system effects, altered hematology, Kidney effects, Thymus effects

Dermal
 Rat
 - 90 dMethod: OECD Test Guideline 411
 No toxicologically significant effects were found.

Mutagenicity : Animal testing did not show any mutagenic effects.
 Did not cause genetic damage in cultured bacterial cells.
 Genetic damage in cultured mammalian cells was observed in one laboratory test but was not observed in others.

Teratogenicity : Animal testing showed no developmental toxicity.

S-Metolachlor

Repeated dose toxicity : No toxicological effects warranting significant target organ toxicity classification were seen below the recommended guidance values for classification., Liver effects

Reproductive toxicity : No toxicity to reproduction

Benoxacor

Repeated dose toxicity : Ingestion
 multiple species
 -
 No toxicological effects warranting significant target organ toxicity classification were seen below the recommended guidance values for classification., Gastrointestinal effects, Liver effects, Kidney effects


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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).

Material	IARC	NTP	OSHA
Naphthalene	2B	X	

SECTION 12. ECOLOGICAL INFORMATION
Aquatic Toxicity
Naphthalene

96 h LC50	: Fish (unspecified species) 0.96 mg/l
8 d NOEC	: Lemna gibba (duckweed) > 16 mg/l ASTM E 1415-91
48 h EC50	: Daphnia magna (Water flea) 2.16 mg/l OECD Test Guideline 202
40 d	: NOEC Fish (unspecified species) 0.12 mg/l
28 d	: NOEC Daphnia magna (Water flea) 3 mg/l

S-Metolachlor

96 h LC50	: Oncorhynchus mykiss (rainbow trout) 1.23 mg/l
96 h EC50	: Algae 0.077 mg/l
48 h EC50	: Daphnia magna (Water flea) 11.24 mg/l

Environmental Fate
Naphthalene

Bioaccumulation	: OECD Test Guideline 305 Bioaccumulation is unlikely.
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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.


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SECTION 13. DISPOSAL CONSIDERATIONS

- Waste disposal methods - Product : Do not contaminate water, food or feed by disposal. Open dumping is prohibited. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. 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, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of properly.
- Waste disposal methods - Container : 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 or night.
- Contaminated packaging : No applicable data available.

SECTION 14. TRANSPORT INFORMATION

- | | | |
|--------|----------------------|--|
| IATA_C | UN number | : 3082 |
| | Proper shipping name | : Environmentally hazardous substance, liquid, n.o.s. (S-Metolachlor, Naphthalene) |
| | Class | : 9 |
| | Packing group | : III |
| IMDG | Labelling No. | : 9MI |
| | UN number | : 3082 |
| | Proper shipping name | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (S-Metolachlor, Naphthalene) |
| | Class | : 9 |
| | Packing group | : III |
| | Labelling No. | : 9 |
| | Marine pollutant | : yes (S-Metolachlor, Naphthalene) |

Not regulated by DOT unless a single package contains 100 or more pounds Naphthalene.


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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.

CAUTION!

Causes eye irritation. Harmful if swallowed or absorbed through the skin . Avoid contact with skin, eyes and clothing. May cause skin sensitization reactions in certain individuals.

SARA 311/312 Hazard classification : Acute toxicity (any route of exposure)
 Serious eye damage or eye irritation
 Specific target organ toxicity (single or repeated exposure)
 Aspiration hazard
 Carcinogenicity

SARA 313 Regulated Chemical(s) : Naphthalene

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):
 Naphthalene

EPA Reg. No. : 352-625
 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.

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SECTION 16. OTHER INFORMATION

	NFPA
Health :	2
Flammability :	1
Reactivity/Physical hazard :	0

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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.