

**DuPont™ Cinch® ATZ Herbicide**

Version 2.0

Revision Date 11/23/2015

Ref. 130000030066

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® ATZ Herbicide
Tradename/Synonym : DuPont DPX-H1W81 Herbicide
DPX-H1W81

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

SECTION 2. HAZARDS IDENTIFICATION

Product hazard category
Specific target organ toxicity - repeated exposure Category 2

Label content

Pictogram :





DuPont™ Cinch® ATZ Herbicide

Version 2.0

Revision Date 11/23/2015

Ref. 130000030066

Signal word : Warning

Hazardous warnings : May cause damage to organs through prolonged or repeated exposure. (Heart, Kidney)

Hazardous prevention measures : Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Get medical advice/ attention if you feel unwell.
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
Ethane-1,2-diol	107-21-1	<10 %
Atrazine	1912-24-9	33 %
S-Metolachlor	87392-12-9	26.1 %
Benoxacor	98730-04-2	<5 %
Other Ingredients		>25.9%

**DuPont™ Cinch® ATZ Herbicide**

Version 2.0

Revision Date 11/23/2015

Ref. 130000030066

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.
For medical emergencies involving this product, call toll free 1-800-441-3637. See Label for Additional Precautions and Directions for Use.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
- 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)

**DuPont™ Cinch® ATZ Herbicide**

Version 2.0

Revision Date 11/23/2015

Ref. 130000030066

- 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) : Do not breathe vapor or mist. Avoid contact with skin, eyes and clothing. 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


DuPont™ Cinch® ATZ Herbicide

Version 2.0

Revision Date 11/23/2015

Ref. 130000030066

as possible, wash thoroughly and change into clean clothing.

- 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 : 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. Ensure adequate ventilation. Refer to the product label for additional Engineering Controls.
- Personal protective equipment
- Skin and body protection : Mixers, loaders, applicators and other handlers must wear:
 Coveralls worn over short-sleeved shirt and short pants
 Chemical-resistant gloves
 Chemical resistant footwear plus socks
 Chemical resistant headgear for overhead exposure
 Chemical resistant apron when mixing, loading, or cleaning equipment or spills.
 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 short-sleeved shirt and short pants
 Chemical resistant gloves made of any waterproof material
 Chemical resistant footwear plus socks
 Chemical resistant headgear for overhead exposure
- 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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with


DuPont™ Cinch® ATZ Herbicide

Version 2.0

Revision Date 11/23/2015

Ref. 130000030066

this product. Do not reuse them. Use this product in accordance with its label.

**Exposure Guidelines
Exposure Limit Values**

Ethane-1,2-diol

TLV	(ACGIH)	100 mg/m ³	TLV-C Aerosol.
AEL *	(DUPONT)	10 mg/m ³	8 & 12 hr. TWA Particulate.
AEL *	(DUPONT)	50 ppm	8 & 12 hr. TWA Vapor.

Atrazine

TLV	(ACGIH)	2 mg/m ³	TWA Inhalable fraction.
AEL *	(DUPONT)	2.5 mg/m ³	8 & 12 hr. TWA

S-Metolachlor

No applicable data available.

Benoxacor

No applicable data available.

Atrazine

TLV	(ACGIH)	2 mg/m ³	TWA Inhalable fraction.
AEL *	(DUPONT)	2.5 mg/m ³	8 & 12 hr. TWA

Ethane-1,2-diol

TLV	(ACGIH)	100 mg/m ³	TLV-C Aerosol.
AEL *	(DUPONT)	10 mg/m ³	8 & 12 hr. TWA Particulate.
AEL *	(DUPONT)	50 ppm	8 & 12 hr. TWA Vapor.

* 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

**DuPont™ Cinch® ATZ Herbicide**

Version 2.0

Revision Date 11/23/2015

Ref. 130000030066

Physical state	: liquid
Form	: liquid
Color	: white
Odor	: paint
Odor threshold	: No applicable data available.
pH	: 6.9 at 25 °C (77 °F) (1% solution in water)
Melting point/range	: No applicable data available.
Boiling point/boiling range	: Boiling point/boiling range 216 °F (216 °F)
Flash point	: >212 °F Method: closed cup
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)	: 1.11 at 25 °C (77 °F)
Water solubility	: No applicable data available.
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.

**DuPont™ Cinch® ATZ Herbicide**

Version 2.0

Revision Date 11/23/2015

Ref. 130000030066

Viscosity, kinematic : No applicable data available.

Viscosity, dynamic : No applicable data available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.

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 reasonably foreseeable.

Incompatible materials : No materials to be especially mentioned.

Hazardous decomposition products : No applicable data available.

SECTION 11. TOXICOLOGICAL INFORMATION

DuPont™ Cinch® ATZ Herbicide

Inhalation 4 h LC50 : > 1.6 mg/l , Rat

Dermal LD50 : > 2,020 mg/kg , Rat

Oral LD50 : 3,271 mg/kg , female, Rat

Skin irritation : No skin irritation, Rabbit
Minimal effects that do not meet the threshold for classification.Eye irritation : No eye irritation, Rabbit
Minimal effects that do not meet the threshold for classification.

Sensitisation : Did not cause sensitisation on laboratory animals., Guinea pig

Repeated dose toxicity :
no data available

Further information : Information presented in this Section conforms to the requirements of


DuPont™ Cinch® ATZ Herbicide

Version 2.0

Revision Date 11/23/2015

Ref. 130000030066

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.

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

Ethane-1,2-diol

Carcinogenicity : Not classifiable as a human carcinogen.
Animal testing did not show any carcinogenic effects.

Mutagenicity : Animal testing did not show any mutagenic effects.
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Reproductive toxicity : No toxicity to reproduction
No effects on or via lactation
Animal testing showed no reproductive toxicity.

Teratogenicity : Evidence suggests the substance is not a developmental toxin in animals.

Atrazine

Carcinogenicity : Not classifiable as a human carcinogen.

Mutagenicity : Animal testing did not show any mutagenic effects.

Reproductive toxicity : Weight of evidence does not support classification for reproductive toxicity

S-Metolachlor

Carcinogenicity : Not classifiable as a human carcinogen.
No increased incidence of cancer was observed in laboratory animals.

Reproductive toxicity : No toxicity to reproduction

Benoxacor


DuPont™ Cinch® ATZ Herbicide

Version 2.0

Revision Date 11/23/2015

Ref. 130000030066

Carcinogenicity : Not classifiable as a human carcinogen.
Overall weight of evidence indicates that the substance is not carcinogenic.

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
Ethane-1,2-diol

96 h LC50 : Pimephales promelas (fathead minnow) 72,860 mg/l
96 h ErC50 : Pseudokirchneriella subcapitata (green algae) 6,500 mg/l
48 h EC50 : Daphnia magna (Water flea) > 100 mg/l OECD Test Guideline 202

Atrazine

96 h LC50 : Oncorhynchus mykiss (rainbow trout) 4.5 mg/l
96 h EC50 : Pseudokirchneriella subcapitata (green algae) 0.049 mg/l
48 h EC50 : Daphnia magna (Water flea) 6.9 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
Ethane-1,2-diol

Biodegradability : Readily biodegradable 90 - 100 % OECD Test Guideline 301


DuPont™ Cinch® ATZ Herbicide

Version 2.0

Revision Date 11/23/2015

Ref. 130000030066

- Bioaccumulation : Bioaccumulation is unlikely.
- 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. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply where weather conditions favour drift from areas treated. See product label for additional application instructions relating to environmental precautions.

SECTION 13. DISPOSAL CONSIDERATIONS

- Waste disposal methods - Product : Do not contaminate water, food or feed by disposal. Open dumping is prohibited. 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, Atrazine) |
| | Class | : 9 |
| | Packing group | : III |
| | Labelling No. | : 9MI |
| IMDG | UN number | : 3082 |
| | Proper shipping name | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (S-Metolachlor, Atrazine) |
| | Class | : 9 |


DuPont™ Cinch® ATZ Herbicide

Version 2.0

Revision Date 11/23/2015

Ref. 130000030066

Packing group : III
 Labelling No. : 9

Marine pollutant : yes (S-Metolachlor, Atrazine)

Only regulated by DOT when a single package contains 5,000 or more pounds Ethylene Glycol.

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, inhaled or absorbed through skin. Avoid contact with skin, eyes and clothing. Avoid breathing vapor or spray mist. May cause skin sensitization reactions in certain individuals.

SARA 313 Regulated Chemical(s) : Atrazine, Ethylene Glycol

Atrazine, Ethane-1,2-diol

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): Atrazine, Ethylene Glycol

Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): Atrazine, Ethane-1,2-diol

NJ Right to Know Regulated Chemical(s) : Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): Atrazine, Ethane-1,2-diol


DuPont™ Cinch® ATZ Herbicide

Version 2.0

Revision Date 11/23/2015

Ref. 130000030066

Title III hazard classification	:	Acute Health Hazard: Yes Chronic Health Hazard: No Fire: No Reactivity/Physical hazard: No Pressure: No
CERCLA Reportable Quantity	:	50001 lbs Based on the percentage composition of this chemical in the product.: Ethane-1,2-diol
EPA Reg. No.	:	352-624 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	:	WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Atrazine

SECTION 16. OTHER INFORMATION

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

™ Trademark of E.I. du Pont de Nemours and Company.

® Registered trademark of E.I. du Pont de Nemours and Company

Revision Date : 11/23/2015

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



DuPont™ Cinch® ATZ Herbicide

Version 2.0

Revision Date 11/23/2015

Ref. 130000030066

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.

Significant change from previous version is denoted with a double bar.