

**DuPont™ Stout™ Herbicide**

Version 2.0

Revision Date 06/18/2015

Ref. 130000033396

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™ Stout™ Herbicide
Tradename/Synonym : NICOSULFURON (2-[[[(4,6-dimethoxypyrimidin-2-yl)aminocarbonyl]aminosulfonyl]-N,N-dimethyl-3-pyridinecarboxamide
THIFENSULFURON METHYL Methyl 3-[[[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino]sulfonyl]-2-thiophenecarboxylate
DPX-NHG22

Product Use : Herbicide

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

Manufacturer/Supplier : DuPont
4417 Lancaster Pike
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

Not classified as a hazardous substance or mixture according to the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard 2012.

Other hazards

If you mill or grind this product you may change its toxicological properties.

**DuPont™ Stout™ Herbicide**

Version 2.0

Revision Date 06/18/2015

Ref. 130000033396

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Nicosulfuron	111991-09-4	67.5 %
Thifensulfuron methyl	79277-27-3	5 %
Modified Aromatic Sulfonate Salt		1 - 5 %
Sodium carbonate	497-19-8	1 - 5 %
Other Ingredients		17.1 - 25.9 %

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 : 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 : No specific intervention is indicated as the compound is not likely to be hazardous.
- 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.

**DuPont™ Stout™ Herbicide**

Version 2.0

Revision Date 06/18/2015

Ref. 130000033396

- 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. 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.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water, Foam, Dry chemical, Carbon dioxide (CO2)
- Unsuitable extinguishing media : High volume water jet, (contamination risk)
- Specific hazards : Not a fire or explosion hazard.
- 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.



DuPont™ Stout™ Herbicide

Version 2.0

Revision Date 06/18/2015

Ref. 130000033396

- 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 protective equipment immediately after handling this product. Wash the outside of gloves before removing. Remove clothing/PPE immediately if material gets inside. As soon as possible, wash thoroughly and change into clean clothing.
- Handling (Physical Aspects) : No applicable data available.
- Dust explosion class : No applicable data available.
- Storage : Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in original container. Store in a cool, dry 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 : Use only with adequate ventilation. 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. IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified for "Applicators and Other Handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.
- Personal protective equipment
- Skin and body protection : 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 greater than or equal to 14 mils



DuPont™ Stout™ Herbicide

Version 2.0

Revision Date 06/18/2015

Ref. 130000033396

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, Category A (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber), all greater than or equal to 14 mils
 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.

Exposure Guidelines
 Exposure Limit Values

Thifensulfuron methyl
 AEL * (DUPONT) 5 mg/m3 8 & 12 hr. TWA Total dust.

Nicosulfuron
 AEL * (DUPONT) 5 mg/m3 8 & 12 hr. TWA Respirable dust.

Modified Aromatic Sulfonate Salt
 No applicable data available.

Sodium carbonate
 AEL * (DUPONT) 5 mg/m3 8 & 12 hr. TWA Total dust.

* 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
 Color : No applicable data available.

**DuPont™ Stout™ Herbicide**

Version 2.0

Revision Date 06/18/2015

Ref. 130000033396

Odor	: none
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.

**DuPont™ Stout™ Herbicide**

Version 2.0

Revision Date 06/18/2015

Ref. 130000033396

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	:	No applicable data available.
Incompatible materials	:	None reasonably foreseeable.
Hazardous decomposition products	:	No applicable data available.

SECTION 11. TOXICOLOGICAL INFORMATION

DuPont™ Stout™ Herbicide

Inhalation 4 h Acute toxicity estimate	:	5.6 mg/l , Rat
Dermal Acute toxicity estimate	:	> 5,000 mg/kg , Rat
Dermal Acute toxicity estimate	:	> 5,000 mg/kg , Rabbit
Oral Acute toxicity estimate	:	> 5,000 mg/kg , Rat
Skin irritation	:	No skin irritation, Rabbit
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

Nicosulfuron

Repeated dose toxicity	:	Oral Mouse - 90 d NOAEL: 300 mg/kg No toxicologically significant effects were found.
	:	Oral Mouse - 28 d No toxicologically significant effects were found.


DuPont™ Stout™ Herbicide

Version 2.0

Revision Date 06/18/2015

Ref. 130000033396

Oral
Rat
- 90 d
No toxicologically significant effects were found.

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
Animal testing showed no reproductive toxicity.

Teratogenicity : Did not show teratogenic effects in animal experiments.

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

Oral - feed
multiple species
-
Reduced body weight gain

Carcinogenicity : Animal testing did not show any carcinogenic effects.

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

Reproductive toxicity : No toxicity to reproduction
Animal testing showed no reproductive toxicity.

Teratogenicity : Did not show teratogenic effects in animal experiments.
Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

Sodium carbonate
Repeated dose toxicity : Inhalation
Rat


DuPont™ Stout™ Herbicide

Version 2.0

Revision Date 06/18/2015

Ref. 130000033396

-
Respiratory tract irritation

- Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Evidence suggests this substance does not cause genetic damage in animals.
- Reproductive toxicity : Animal testing showed no reproductive toxicity.
- Teratogenicity : Animal testing showed no developmental toxicity.

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
Nicosulfuron

- 96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 1,000 mg/l
- 96 h LC50 : Lepomis macrochirus (Bluegill sunfish) > 1,000 mg/l
- 72 h EbC50 : Pseudokirchneriella subcapitata (green algae) 24.75 mg/l
- 72 h ErC50 : Pseudokirchneriella subcapitata (green algae) 71.17 mg/l
- 7 d EC50 : Lemna gibba (duckweed) 0.0032 mg/l
- 96 h EC50 : Lemna gibba (duckweed) > 0.120 mg/l
- 48 h EC50 : Daphnia magna (Water flea) > 1,000 mg/l
- 90 d : NOEC Oncorhynchus mykiss (rainbow trout) 24 mg/l


DuPont™ Stout™ Herbicide

Version 2.0

Revision Date 06/18/2015

Ref. 130000033396

21 d : NOEC Daphnia magna (Water flea) 43 mg/l

Thifensulfuron methyl

96 h LC50 : Oncorhynchus mykiss (rainbow trout) > 100 mg/l

14 d EC50 : Lemna minor (duckweed) 0.0013 mg/l

48 h EC50 : Daphnia magna (Water flea) 470 mg/l

28 d : NOEC Americamysis bahia (mysid shrimp) 7.93 mg/l

Sodium carbonate

96 h LC50 : Lepomis macrochirus (Bluegill sunfish) 300 mg/l

48 h LC50 : Ceriodaphnia dubia (water flea) 200 - 227 mg/l

4 d : EC50 Daphnia magna (Water flea) 228 - 297 mg/l

Environmental Fate
Sodium carbonate

Biodegradability : The methods for determining biodegradability are not applicable to inorganic substances.

Bioaccumulation : Does not bioaccumulate.

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. Do not apply where/when conditions favour runoff.

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.

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


DuPont™ Stout™ Herbicide

Version 2.0

Revision Date 06/18/2015

Ref. 130000033396

In the event of a major spill, fire or other emergency, call 1-800-441-3637 day or night.

Contaminated packaging : 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.
Do not apply where/when conditions favour runoff.

SECTION 14. TRANSPORT INFORMATION

IATA_C	UN number	: 3077
	Proper shipping name	: Environmentally hazardous substance, solid, n.o.s. (Nicosulfuron, Thifensulfuron-methyl)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9MI
IMDG	UN number	: 3077
	Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Nicosulfuron, Thifensulfuron-methyl)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9
	Marine pollutant	: yes (Nicosulfuron, Thifensulfuron-methyl)

Not regulated as a hazardous material by DOT.

SECTION 15. REGULATORY INFORMATION

Other regulations : This Safety Data Sheet is for a pesticide product registered by the US Environmental Protection Agency (USEPA) and is therefore also subject to certain labeling requirements under US pesticide law (FIFRA). These requirements differ from the classification criteria and hazard information required by OSHA for safety data sheets, and for workplace labels of non-



DuPont™ Stout™ Herbicide

Version 2.0

Revision Date 06/18/2015

Ref. 130000033396

pesticide chemicals. The following is the mandatory hazard information required by USEPA on the pesticide label:

CAUTION!

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes and clothing.

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): Kaolin, Sucrose
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): Kaolin, Phenol
Title III hazard classification	: Acute Health Hazard: Yes Chronic Health Hazard: No Fire: No Reactivity/Physical hazard: No Pressure: No
CERCLA Reportable Quantity	: 493827 lbs Based on the percentage composition of this chemical in the product.: Phenol
SARA Reportable Quantity	: 493827 lbs Based on the percentage composition of this chemical in the product.: Phenol
EPA Reg. No.	: 352-721 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.

SECTION 16. OTHER INFORMATION

**DuPont™ Stout™ Herbicide**

Version 2.0

Revision Date 06/18/2015

Ref. 130000033396

NFPA

Health	:	1
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 : 06/18/2015

Contact person : DuPont Crop Protection, Wilmington, DE, 19898, 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.

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