

Version 4.0

Issue Date : 03/18/2019 Ref. 130000033396

Revision Date : 10/08/2018

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™ 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

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

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.

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
Nicosulfuron	111991-09-4	67.5 %



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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.

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 : 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.

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.



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Most important

symptoms/effects, acute

and delayed

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)

: No applicable data available.

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.

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.



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#### **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)

Dust explosion class

Storage

No applicable data available.No applicable data available.

: 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. 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, Category A (such as butyl rubber, natural rubber,

neoprene rubber, or nitrile rubber), all greater than or equal to 14 mils



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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

Nicosulfuron			
AEL*	(DuPont)	5 mg/m3	8 & 12 hr. TWA

Kaolin			
Permissible	(OSHA)	5 mg/m3	8 hr. TWA
exposure limit:		_	
Permissible	(OSHA)	15 mg/m3	8 hr. TWA
exposure limit:			
Permissible	(OSHA)	15 millions of particles per cubic	TWA
exposure limit:		foot of air	
Permissible	(OSHA)	50 millions of particles per cubic	TWA
exposure limit:		foot of air	
Permissible	(OSHA)	5 mg/m3	TWA
exposure limit:			
Permissible	(OSHA)	15 mg/m3	TWA
exposure limit:			
TLV	(ACGIH)	2 mg/m3	TWA

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

Sucrose			
Permissible exposure limit:	(OSHA)	5 mg/m3	8 hr. TWA
Permissible exposure limit:	(OSHA)	15 mg/m3	8 hr. TWA
TLV	(ACGIH)	10 mg/m3	TWA



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

Quartz			
Permissible	(OSHA)	0.05 mg/m3	8 hr. TWA
exposure limit:			
Permissible	(OSHA)	2.4 millions of particles per	TWA
exposure limit:		cubic foot of air	
Permissible	(OSHA)	0.1 mg/m3	TWA
exposure limit:			
Permissible	(OSHA)	0.05 mg/m3	TWA
exposure limit:			
TLV	(ACGIH)	0.025 mg/m3	TWA
AEL*	(DuPont)	0.01 mg/m3	12 hr. TWA
AEL *	(DuPont)	0.02 mg/m3	8 hr. TWA

<sup>\*</sup> 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.

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.

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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.

#### **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

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> Inhalation 4 h Acute 5.6 mg/l, Rat

toxicity estimate

Dermal Acute toxicity

estimate

> 5,000 mg/kg , Rat

Dermal Acute toxicity

> 5,000 mg/kg , Rabbit

estimate

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

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.

Nicosulfuron

Ingestion Repeated dose toxicity

multiple species

- 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.

No effects on or via lactation

Animal testing showed effects on embryo-fetal development at levels Teratogenicity

equal to or above those causing maternal toxicity.

Thifensulfuron methyl

Repeated dose toxicity

The following effects occurred at levels of exposure that significantly



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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

human

-

No toxicological effects warranting significant target organ toxicity classification were seen below the recommended guidance values for

classification.

Carcinogenicity : Weight of evidence does not support classification as a carcinogen

Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic

effects.

Weight of evidence does not support classification as a germ cell

mutagen.

Information given is based on data obtained from similar substances.

Reproductive toxicity : Weight of evidence does not support classification for 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



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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

Quartz 1 X X

#### SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity Nicosulfuron

96 h LC50 : Cyprinodon variegatus (sheepshead minnow) > 124 mg/l

7 d EC50 : Lemna gibba (duckweed) 0.0032 mg/l US EPA Test Guideline OPP

122-2 & 123-2

14 d NOEC : Lemna gibba (duckweed) 0.0025 mg/l

48 h EC50 : Daphnia magna (Water flea) > 1,000 mg/l US EPA Test Guideline

OPP 72-2

90 d : NOEC Oncorhynchus mykiss (rainbow trout) 24 mg/l OECD Test

Guideline 210

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

202

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 mg/l

**Environmental Fate** 

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Nicosulfuron

Bioaccumulation : Bioaccumulation is unlikely.

Sodium carbonate

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.

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

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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 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 moderate eye irritation. Harmful if absorbed through skin. Avoid

contact with skin, eyes and clothing.

SARA 311/312 Hazard

classification

: No SARA Hazards

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, Sodium sulphate

**CERCLA** Reportable

Quantity

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

493827 lbs Phenol



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

493827 lbs 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.

California Prop. 65 : This product can expose you to substances including 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**

Health

NFPA 1

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.

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