



Spartan®

Version 2.0

Revision Date 03/25/2015

Ref. 130000000493

This SDS adheres to the standards and regulatory requirements of Canada and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Spartan®
Tradename/Synonym : B10044203
DPX-L5300 75WG

MSDS Number : 130000000493

Product Use : Herbicide

Manufacturer : E.I. du Pont Canada Company
P.O. Box 2200, Streetsville
Mississauga, ON
L5M 2H3
Canada

Product Information : 1-800-387-2122
Medical Emergency : 1-800-441-3637 (24 hours)

Other information : professional use

SECTION 2. HAZARDS IDENTIFICATION

Potential Health Effects

Skin : May cause: Irritation with discomfort or rash.

Eyes : May cause: Eye irritation, Discomfort, tearing, Blurred vision.

Inhalation

Sodium carbonate : May cause respiratory tract irritation.

Target Organ

Sodium carbonate : Respiratory Tract

Carcinogenicity

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.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Tribenuron methyl	101200-48-0	75 %
Sodium carbonate	497-19-8	4 %
Other Ingredients		21 %

SECTION 4. FIRST AID MEASURES

- 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.
- Inhalation : Remove person to fresh air. If signs/symptoms continue, get medical attention. Artificial respiration and/or oxygen may be necessary. Call a poison control center or doctor for treatment advice.
- Ingestion : Obtain medical attention. DO NOT induce vomiting unless directed to do so by a physician or poison control center. If victim is conscious: Rinse mouth with water.
- General advice : Never give anything by mouth to an unconscious person.

SECTION 5. FIREFIGHTING MEASURES

Flammable Properties

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Flash point	: Not applicable
Auto-ignition temperature	: 400 °C (752 °F)
Lower explosion limit/ lower flammability limit	: 0.365 mg/m3
Suitable extinguishing media	: Water spray, Foam, Dry chemical, Carbon dioxide (CO2)
Unsuitable extinguishing media	: High volume water jet, (contamination risk)
Firefighting Instructions	: Wear full protective clothing and self-contained breathing apparatus. (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.
Spill Cleanup	: Sweep up and shovel into suitable containers for disposal.
Accidental Release Measures	: Prevent material from entering sewers, waterways, or low areas. 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. As soon as possible, wash thoroughly and change into clean clothing. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing.
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- Handling (Physical Aspects) : Keep away from heat and sources of ignition.
- 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. Stable under recommended storage conditions.
- Storage temperature : < 50 °C (< 122 °F)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls : Ensure adequate ventilation.
- Personal protective equipment
 - Respiratory protection : Half mask with a particle filter P2 (EN 143)
 - Hand protection : Material: Nitrile rubber
Glove thickness: 0.4 - 0.7 mm
Wearing time: 480 min
Additional protection: Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
 - Eye protection : Safety glasses
 - Skin and body protection : Lightweight protective clothing
- Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. All chemical protective clothing should be visually inspected prior to use. Clothing and gloves should be replaced in case of chemical or physical damage or if contaminated. Only protected handlers may be in the area during application.

Exposure Guidelines
Exposure Limit Values

None established.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: solid, granular
Color	: light brown
Odor	: mild, sweet
pH	: 8.0 at 10 g/l 25 °C (77 °F)
Melting point/range	: Not available for this mixture.
Bulk density	: 730 kg/m ³
Water solubility	: dispersible

SECTION 10. STABILITY AND REACTIVITY

Stability	: No decomposition if stored and applied as directed.
Conditions to avoid	: Processing temperature > 140 °C (> 284 °F) Decomposes slowly on exposure to water. To avoid thermal decomposition, do not overheat. Under severe dusting conditions, this material may form explosive mixtures in air.
Incompatibility	: None reasonably foreseeable.
Hazardous decomposition products	: Carbon dioxide (CO ₂), Nitrogen oxides (NO _x)
Hazardous reactions	: No dangerous reaction known under conditions of normal use. Polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Spartan®	
Dermal LD50	: > 5,000 mg/kg , Rat
Oral LD50	: > 5,000 mg/kg , Rat
Skin irritation	: slight irritation, Rabbit
Eye irritation	: slight irritation, Rabbit
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
Rat
28 d
No adverse effect has been observed in chronic toxicity tests.

Tribenuron methyl

- Inhalation 4 h LC50 : > 6.0 mg/l , Rat
- Skin sensitization : Causes sensitisation., Guinea pig
- Carcinogenicity : Not classifiable as a human carcinogen.
An increased incidence of tumours was observed in laboratory animals.
Target(s):
Mammary glands
- 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

Sodium carbonate

- Inhalation 4 h LC50 : 1.15 mg/l , Rat
Target Organs: Respiratory Tract
Respiratory 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.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

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96 h LC50	:	Oncorhynchus mykiss (rainbow trout) 260 mg/l
96 h LC50	:	Lepomis macrochirus (Bluegill sunfish) 340 mg/l
48 h EC50	:	Daphnia magna (Water flea) > 1,000 mg/l
21 d	:	NOEC Oncorhynchus mykiss (rainbow trout) > 560 mg/l
21 d	:	NOEC Daphnia magna (Water flea) 120 mg/l

Tribenuron methyl

120 h EC50	:	Pseudokirchneriella subcapitata (microalgae) 0.0208 mg/l
14 d EC50	:	Lemna gibba (duckweed) 0.00424 mg/l

Environmental Fate

Sodium carbonate

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

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal	:	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.
Container disposal:	:	Container Refilling and Disposal: Refer to the product label for instructions. Do not transport if this container is damaged or leaking.
Environmental Hazards	:	Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

IATA_C UN number : 3077

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

SECTION 15. REGULATORY INFORMATION

Other regulations : The mixture is classified as dangerous in accordance with Directive 1999/45/EC. Take note of Dir 94/33/EC on the protection of young people at work. Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work. Take note of Directive 96/82/EC on the control of major-accident hazards involving dangerous substances. Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values. Take note of Dir 92/85/EEC on the safety and health at work of pregnant workers.

PCP Registration # : 23632
Remarks : Regulated under the Pest Control Products Act - WHMIS exempt.

SECTION 16. OTHER INFORMATION

MSDS preparation date : 03/25/2015

Contact person : E.I. DuPont Canada Company, Mississauga, Ontario, L5M 2H3



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