



DuPont™ Lannate® SP Insecticide

Version 2.1

Revision Date 01/14/2016

Ref. 130000000505

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	:	DuPont™ Lannate® SP Insecticide
Tradename/Synonym	:	B10029800 DPX-X1179 90SP Yugo Lannate SP Methomyl 90SP Lannate 90WD 90WD METHOMYL (S-methyl N-[(methylcarbamoyl)oxy]thioacetimidate)
SDS Number	:	130000000505
Product Use	:	Insecticide
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)

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Warning symptoms:

Poisoning produces effects associated with anticholinesterase activity which may include: Weakness, Blurred vision, Headache, Nausea, Abdominal pain, discomfort in the chest, constriction of pupils, Sweating, slow pulse, muscle twitching

Potential Health Effects

Skin

**DuPont™ Lannate® SP Insecticide**

Version 2.1

Revision Date 01/14/2016

Ref. 130000000505

Methomyl : May cause acute acetyl cholinesterase depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness., Nausea, Abdominal pain, Abnormal tearing, Abnormal salivation, constriction of pupils, Blurred vision, muscle twitching, Convulsions, Respiratory effects.

Eyes

Methomyl : May irritate eyes. May cause acute acetyl cholinesterase depression., Abnormal tearing, constriction of pupils, Blurred vision.

Inhalation

Methomyl : May cause acute acetyl cholinesterase depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness., Nausea, Abdominal pain, Abnormal tearing, Abnormal salivation, constriction of pupils, Blurred vision, muscle twitching, Convulsions, Respiratory effects.

Ingestion

Methomyl : May cause acute acetyl cholinesterase depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness., Nausea, Abdominal pain, Abnormal tearing, Abnormal salivation, constriction of pupils, Blurred vision, muscle twitching, Convulsions, Respiratory effects.

Target Organ

Methomyl : Central nervous system

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.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Methomyl	16752-77-5	90 %

**DuPont™ Lannate® SP Insecticide**

Version 2.1

Revision Date 01/14/2016

Ref. 130000000505

Other Ingredients		10 %
-------------------	--	------

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 : Move to fresh air. Artificial respiration and/or oxygen may be necessary. Call a poison control center or doctor for treatment advice.
- Ingestion : Call a physician or poison control centre immediately. If swallowed, drink 1 or 2 glasses of water and try once or twice to induce vomiting by touching the back of throat with finger. Induce vomiting if person is conscious. Never give anything by mouth to an unconscious person.
- General advice : ATROPINE IS AN ANTIDOTE - SEEK MEDICAL ATTENTION AT ONCE IN ALL CASES OF SUSPECTED POISONINGS. 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.
- Notes to physician : This product is an acetyl cholinesterase inhibiting carbamate insecticide. Morphine therapy is contra-indicated.
Probable mucosal damage may contraindicate the use of gastric lavage. Morphine, 2-PAM and oxime therapy are contra-indicated.
Administer atropine sulphate as an antidote until complete atropinisation (1.2-2.0 mg i.v. every 10-30 minutes). However, for exposure to methomyl in combination with organophosphorous insecticides, 2-PAM (1-2 g slow i.v.) may be used as required to supplement the atropine sulfate treatment as described above. Artificial respiration and/or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until full recovery is assured.

**DuPont™ Lannate® SP Insecticide**

Version 2.1

Revision Date 01/14/2016

Ref. 130000000505

SECTION 5. FIREFIGHTING MEASURES

Flammable Properties

Flash point : Not applicable

Lower explosion limit/ lower
flammability limit : 0.096 g/l

Fire and Explosion Hazard : Fire or intense heat may cause violent rupture of packages. Dust may form explosive mixture in air.

Suitable extinguishing media : Water spray, Foam, Dry chemical, Carbon dioxide (CO₂)Unsuitable extinguishing
media : High volume water jet, (contamination risk)Firefighting Instructions : In the event of fire, wear self-contained breathing apparatus. Wear full protective equipment.
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. Soak up with sawdust, sand, oil dry or other absorbent material. If product enters crevices and can not be removed, treat with a sodium hydroxide solution and allow to stand 4 hours. Note: Sodium hydroxide is caustic and causes burns. Do not get in eyes, skin or clothing.

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.

**DuPont™ Lannate® SP Insecticide**

Version 2.1

Revision Date 01/14/2016

Ref. 130000000505

SECTION 7. HANDLING AND STORAGE

- | | |
|-----------------------------|---|
| Handling (Personnel) | : Do not breathe dust or spray mist. Do not get in eyes, on skin, or on clothing. 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. |
| Handling (Physical Aspects) | : Keep away from heat and sources of ignition. Use only in well-ventilated areas. |
| Storage | : Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Handle this package carefully to prevent breakage of inner bag when stored at low temperatures. Allow to warm above 10°C (50°F) for normal handling. Store in original container. Keep container tightly closed in a dry and well-ventilated place. Not for use or storage in or around the home. Keep out of the reach of children. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- | | |
|---|---|
| Engineering controls | : Use only with adequate ventilation. Refer to the product label for additional Engineering Controls. |
| Personal protective equipment
Respiratory protection | : For exposures in enclosed areas: A respirator with an organic vapor-removing cartridge with a prefilter approved for pesticides (NIOSH approval number prefix TC-23C), or a canister approved for pesticides (NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter.
For exposures outdoors: A NIOSH approved dust/mist filtering respirator with any R, P, or HE filter or with approval number prefix TC-21C. |
| Skin and body protection | : Applicators and other handlers exposed to the diluted material must wear:
Long sleeved shirt and long pants
Chemical-resistant gloves
Shoes plus socks
Protective eyewear |

**DuPont™ Lannate® SP Insecticide**

Version 2.1

Revision Date 01/14/2016

Ref. 130000000505

Mixers, loaders, applicators and other handlers who may be exposed to the concentrate must wear:

Long sleeved shirt and long pants

Chemical-resistant gloves

Chemical resistant footwear plus socks

Protective eyewear

Chemical resistant apron

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 eyewear

Protective measures : Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. 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

Methomyl
TLV

(ACGIH)

0.2 mg/m3

TWA Inhalable fraction and 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

Form : solid, powder
Color : white, or, blue
Odor : slight, sulphurous
Specific gravity : 1.2946 at 25 °C (77 °F)
Water solubility : 58 g/l at 25 °C (77 °F)

**DuPont™ Lannate® SP Insecticide**

Version 2.1

Revision Date 01/14/2016

Ref. 130000000505

SECTION 10. STABILITY AND REACTIVITY

Stability	: Stable at normal temperatures and storage conditions.
Incompatibility	: No materials to be especially mentioned. Incompatible products Strong bases
Hazardous decomposition products	: Hazardous thermal decomposition products:: Sulphur oxides, Methyl isocyanate, Hydrogen cyanide (hydrocyanic acid)

SECTION 11. TOXICOLOGICAL INFORMATION

DuPont™ Lannate® SP Insecticide	
Oral LD50	: 23 mg/kg , Rat
Skin irritation	: No skin irritation, Rabbit
Eye irritation	: slight irritation, Rabbit
Sensitisation	: Animal test did not cause sensitization by skin contact., Guinea pig
Further information	: May be lethal if absorbed through eyes: a rabbit died via ocular exposure. This exposure was within the equivalent range that produced mortalities via oral administration.
Methomyl	
Dermal LD50	: > 2,000 mg/kg , Rabbit
Inhalation 4 h LC50	: 0.258 mg/l , Rat
Carcinogenicity	: Did not show carcinogenic effects in animal experiments. Not classifiable as a human carcinogen.
Mutagenicity	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Animal testing did not show any mutagenic effects.
Reproductive toxicity	: Animal testing showed no reproductive toxicity. No toxicity to reproduction
Teratogenicity	: Animal testing showed no developmental toxicity.

**DuPont™ Lannate® SP Insecticide**

Version 2.1

Revision Date 01/14/2016

Ref. 130000000505

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

DuPont™ Lannate® SP Insecticide

- | | | |
|------------|---|---|
| 96 h LC50 | : | Lepomis macrochirus (Bluegill sunfish) 0.63 mg/l |
| 72 h ErC50 | : | Pseudokirchneriella subcapitata (microalgae) > 100 mg/l |
| 48 h EC50 | : | Daphnia (water flea) 0.017 mg/l |

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. Run-off from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate. Do not apply this product if bees are visiting the treatment area. See product label for additional application instructions relating to environmental precautions. No data is available on the product itself.

SECTION 13. DISPOSAL CONSIDERATIONS

- | | | |
|---------------------|---|--|
| Waste Disposal | : | In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate ponds, waterways or ditches with chemical or used container. |
| Waste Disposal | : | Do not contaminate water, food or feed by disposal. 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. |
| Container disposal: | : | Container Refilling and Disposal:
Refer to the product label for instructions.
If the container is to be refilled, do not rinse with any material or introduce any pesticide other than this product.
DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE. |

**DuPont™ Lannate® SP Insecticide**

Version 2.1

Revision Date 01/14/2016

Ref. 130000000505

Do not transport if this container is damaged or leaking.

SECTION 14. TRANSPORT INFORMATION

TDG_ROAD	UN number	: 2757
	Proper shipping name	: CARBAMATE PESTICIDE, SOLID, TOXIC (Methomyl)
	Class	: 6.1
	Packing group	: II
TDG_RAIL	Labelling No.	: 6.1
	UN number	: 2757
	Proper shipping name	: CARBAMATE PESTICIDE, SOLID, TOXIC (Methomyl)
	Class	: 6.1
IATA_C	Packing group	: II
	Labelling No.	: 6.1
	UN number	: 2757
	Proper shipping name	: Carbamate pesticide, solid, toxic (Methomyl)
IMDG	Class	: 6.1
	Packing group	: II
	Labelling No.	: 6.1
	UN number	: 2757
	Proper shipping name	: CARBAMATE PESTICIDE, SOLID, TOXIC (Methomyl)
	Class	: 6.1
	Packing group	: II
	Labelling No.	: 6.1

SECTION 15. REGULATORY INFORMATION

EPA Reg. No. : 352-342

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.



DuPont™ Lannate® SP Insecticide

Version 2.1

Revision Date 01/14/2016

Ref. 130000000505

This product is excluded from listing requirements under EPA/TSCA.

PCP Registration # : 10868
Remarks : Regulated under the Pest Control Products Act - WHMIS exempt.

SECTION 16. OTHER INFORMATION

MSDS preparation date : 01/14/2016

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

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

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.