

**LANNATE® 90**

Version 2.2

Revision Date 21.11.2007

Ref. 130000000505

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

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product information**

Product name : LANNATE® 90

Synonyms : B10029800
: DPX-X1179 90SP

Use of the Substance/Preparation : Insecticide

Company : DuPont International Operations S.a.r.l.
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CH-1218 Le Grand-Saconnex / GE
Switzerland

Telephone : +41-22-717.5111

Telefax : +41-22-717.6135

Emergency telephone : +44-(0)8456-006.640

E-mail address : sds-support@che.dupont.com

Supplier : Du Pont de Nemours (France) S.A.S.
82, rue de Wittelsheim
F-68701 Cernay Cedex

Telephone : +33 3 89 38 38 38

2. HAZARDS IDENTIFICATION

Toxic by inhalation.
Very toxic if swallowed.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	EC-No.	Classification	Concentration [%]
Methomyl	16752-77-5	240-815-0	T+; R28 N; R50 -R53	90

For the full text of the R phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice : This product contains an anticholinesterase compound. Do not use if under

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	medical advice not to work with such compounds.
	Never give anything by mouth to an unconscious person.
Inhalation	: Move to fresh air. Oxygen or artificial respiration if needed. Call a physician or poison control centre immediately.
Skin contact	: Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. In the case of skin irritation or allergic reactions see a physician. Wash contaminated clothing before re-use.
Eye contact	: If in eyes, rinse with water for 15 minutes. Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
Ingestion	: Call a physician or poison control centre immediately. Do not induce vomiting without medical advice. If victim is conscious: Rinse mouth with water.
Notes to physician	
Risks	: This product is a cholinesterase inhibitor carbamate.
Symptoms	: Breathing difficulties, Shortness of breath, Headache, Dizziness, Blurred vision, Nausea, Weakness, constriction of pupils, slow pulse, sweating, muscle twitching
Treatment	: Administer atropine sulphate as an antidote until complete atropinisation. Morphine, 2-PAM and oxime therapy are contra-indicated.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Dry chemical, Water spray,
Extinguishing media which shall not be used for safety reasons	: High volume water jet, (contamination risk),
Special protective equipment for fire-fighters	: In the event of fire, wear self-contained breathing apparatus. Wear suitable protective equipment.
Further information	: Prevent fire extinguishing water from contaminating surface water or the ground water system. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. (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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: Evacuate personnel to safe areas. Use personal protective equipment.
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- Environmental precautions : Prevent further leakage or spillage if safe to do so. Use appropriate container to avoid environmental contamination. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods for cleaning up : Clean-up methods - small spillage Sweep up or vacuum up spillage and collect in suitable container for disposal.
- Clean-up methods - large spillage Prevent further leakage or spillage. Avoid dust formation. Use approved industrial vacuum cleaner for removal. Shovel into suitable container for disposal.
- Additional advice : Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE**Handling**

- Advice on safe handling : Do not breathe dust or spray mist. Provide appropriate exhaust ventilation at places where dust is formed. Wear personal protective equipment.
- Use only in an area equipped with a safety shower.
- Advice on protection against fire and explosion : Keep away from heat and sources of ignition.

Storage

- Requirements for storage areas and containers : Keep locked-up. Store in original container. Store in a place accessible by authorized persons only. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of reach of children. Keep away from food, drink and animal feeding stuffs.
- Advice on common storage : No special restrictions on storage with other products.
- Storage temperature : < 138 °C
- Other data : Stable under recommended storage conditions.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Engineering measures**

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

- Respiratory protection : Respirator with combination filter for vapour/particulate (EN 141). respirator with A2B2-P3 filter
- Hand protection : Material: Nitrile rubber
Glove thickness: 0,4 - 0,7 mm

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Wearing time: 480 min

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

- Eye protection : Safety glasses with side-shields conforming to EN166
- Skin and body protection : Full protective clothing Type 3 - 4 (EN 14605)
- Hygiene measures : Do not breathe dust. Avoid contact with skin, eyes and clothing. Wash hands and face before breaks and immediately after handling the product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. For environmental protection remove and wash all contaminated protective equipment before re-use. Dispose of rinse water in accordance with local and national regulations.
- Protective measures : 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : powder,
- Colour : off-white,
- Odour : slight, sulphurous,
- pH : 6,8 - 7,2 at 10 g/l (25 °C)
- Melting point/range : 78 - 79 °C
- Flash point : not applicable
- Explosive properties : Not explosive
- Bulk density : 540 - 640 kg/m³
- Water solubility : 58 g/l at 25 °C

10. STABILITY AND REACTIVITY

- Conditions to avoid : Temperature : > 38 °C
- Materials to avoid : No materials to be especially mentioned.
- Hazardous decomposition products : Hydrogen cyanide (hydrocyanic acid), Sulphur dioxide, Methyl isocyanate, Carbon dioxide (CO₂), nitrogen oxides (NO_x)
- Hazardous reactions : No decomposition if stored and applied as directed.

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11. TOXICOLOGICAL INFORMATION

- Acute oral toxicity : LD50/ rat: 23 mg/kg(Data on the product itself)
- Acute inhalation toxicity : LC50/ rat : 0,258 mg/l
Method: OECD Test Guideline 403
(Data on the product itself)
- Acute inhalation toxicity
• Methomyl : LC50/ 4 h/ rat : 0,258 mg/l
- Acute dermal toxicity : LD50/ rat > 2 000 mg/kg
(Data on the product itself)
- Skin irritation : rabbit
Result: No skin irritation Method: OECD Test Guideline 404 (Data on the product itself)
- Eye irritation : rabbit
Result: No eye irritation Method: OECD Test Guideline 405 (Data on the product itself)
- Sensitisation : guinea pig Result: Animal test did not cause sensitization by skin contact. (Data on the product itself)
- Mutagenicity assessment
• Methomyl : Animal testing did not show any mutagenic effects.
- Carcinogenicity assessment
• Methomyl : Did not show carcinogenic effects in animal experiments.
- Toxicity to reproduction assessment
• Methomyl : Animal testing did not show any effects on fertility.
- 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.

12. ECOLOGICAL INFORMATION**Elimination information (persistence and degradability)**

- Bioaccumulation : This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Ecotoxicity effects

- Toxicity to fish : LC50/ 96 h/ *Lepomis macrochirus* (Bluegill sunfish) :: 0,63 mg/l
(Data on the product itself)
- Toxicity to algae : / EC50/ 72 h/ *Selenastrum capricornutum*: > 100 mg/l
(Data on the product itself)

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Toxicity to daphnia : / EC50/ 48 h/ Daphnia: 0,017 mg/l
(Data on the product itself)

13. DISPOSAL CONSIDERATIONS

Product : 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.

Contaminated packaging : Do not re-use empty containers.

European Waste Catalogue number : 020108

14. TRANSPORT INFORMATION**ADR**

Class: 6.1
Packaging group: II
Classification Code: T7
HI No.: 60
UN-Number: 2757
Labelling No.: 6.1
Proper shipping name: Carbamate pesticide, solid, toxic (Methomyl)

IATA_C

Class: 6.1
Packaging group: II
UN-Number: 2757
Labelling No.: 6.1
Proper shipping name: Carbamate pesticide, solid, toxic (Methomyl)

IMDG

Class: 6.1
Packaging group: II
UN-Number: 2757
Labelling No.: 6.1
Proper shipping name: Carbamate pesticide, solid, toxic (Methomyl, Methomyl)

Marine pollutant: Marine pollutant

15. REGULATORY INFORMATION**Labelling according to EC Directives**

Symbol(s) : T+ Very toxic
N Dangerous for the environment

Hazardous components: Methomyl

R-phrases : R23 Toxic by inhalation.

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	R28	Very toxic if swallowed.
	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	: S 1/2	Keep locked up and out of the reach of children.
	S13	Keep away from food, drink and animal feeding stuffs.
	S20/21	When using do not eat, drink or smoke.
	S23	Do not breathe spray.
	S24/25	Avoid contact with skin and eyes.
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
	S38	In case of insufficient ventilation, wear suitable respiratory equipment.
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
	S35	This material and its container must be disposed of in a safe way.
	S57	Use appropriate container to avoid environmental contamination.
	SP 1	Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).
	SPo 2	Wash all protective clothing after use.
Special labelling of certain preparations	:	To avoid risks to man and the environment, comply with the instructions for use.

16. OTHER INFORMATION**Text of R phrases mentioned in Section 3**

R28	Very toxic if swallowed.
R50	Very toxic to aquatic organisms.
R53	May cause long-term adverse effects in the aquatic environment.

Further information

Take notice of the directions of use on the label.

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

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