

**VYDATE® SL**

Version 2.2

Revision Date 15.11.2010

Ref.130000000046

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

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

Product name : VYDATE® SL

Synonyms : B10049186
: DPX-D1410 24L

Use of the Substance/Mixture : Insecticide, Nematicide

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2. HAZARDS IDENTIFICATION

Flammable.
Very toxic if swallowed.
Toxic by inhalation.
Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature of the mixture : Pesticide

Chemical Name	CAS-No.	EC-No.	Registration number	Classification	Concentration [%]
Oxamyl	23135-22-0	245-445-3		T+; R26/28 Xn; R21 N; R51 -R53	24
Methanol	67-56-1	200-659-6		F; R11 T; R23/24/25 - R39/23/24/25	>= 40 - < 50

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

4. FIRST AID MEASURES

- General advice : Never give anything by mouth to an unconscious person.
Contains an N-methyl carbamate that inhibits cholinesterase.
- Inhalation : Move to fresh air. Artificial respiration and/or oxygen may be necessary. 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 : Hold eye open and rinse slowly and gently with water for 15-20 minutes. 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. Dangerous amounts can be absorbed through the skin.
- Symptoms : Poisoning produces effects associated with anticholinesterase activity which may include: Breathing difficulties, muscle twitching, sweating, Daze, Headache, Weakness, Blurred vision, constriction of pupils
- Treatment : Administer atropine sulphate as antidote. Morphine, 2-PAM and oxime therapy are contra-indicated.
Allow no further exposure to any cholinesterase inhibitor until full recovery is assured.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water spray, Dry chemical, Foam, Carbon dioxide (CO₂),
- Extinguishing media which shall not be used for safety reasons : High volume water jet, (contamination risk),
- Specific hazards during fire fighting : Hazardous decomposition products formed under fire conditions. Carbon dioxide (CO₂) nitrogen oxides (NO_x)
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus. Use personal 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

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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. Control access to area. Ventilate the area. Use personal protective equipment. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Use appropriate container to avoid environmental contamination. Prevent further leakage or spillage if safe to do so. 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 spill area is porous, the contaminated material must be collected for subsequent treatment or disposal. If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods for cleaning up : Neutralise with sodium hydroxide and allow to stand for 4 hours.
- Clean-up methods - small spillage Soak up with inert absorbent material. Sweep up or vacuum up spillage and collect in suitable container for disposal.
- Clean-up methods - large spillage Prevent further leakage or spillage. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Large spills should be collected mechanically (remove by pumping) for disposal. Collect leaking liquid in sealable (metal/plastic) containers. Collect and contain contaminated absorbent and dike material 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 : Use only in an area equipped with a safety shower.
- Use only clean equipment. Avoid inhalation of vapour or mist. Provide adequate ventilation. Wear personal protective equipment. For personal protection see section 8.
- Advice on protection against fire and explosion : Keep away from heat and sources of ignition.

Storage

- Requirements for storage areas and containers : Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food,

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drink and animal feedingstuffs.

Advice on common storage : No special restrictions on storage with other products. Keep away from:
Oxidizing agents

Storage temperature : > 0 °C

Other data : Stable under recommended storage conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Type Form of exposure	Control parameters	Update	Basis	
Methanol	67-56-1	TWA	260 mg/m3 200 ppm	12 2009	EU ELV	
		Indicative				
		SKIN_DES			02 2006	EU ELV
		Can be absorbed through skin.				
		TWA	260 mg/m3 200 ppm		1995	ZA REL
		STEL	310 mg/m3 250 ppm		1995	ZA REL
		SKIN_DES			1995	ZA REL
		Can be absorbed through skin.				

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory protection : Manufacturing and processing work: Half mask with vapour filter A3 (EN 141)

Respiratory protection : Mixer and loaders must wear: Half mask with vapour filter A3 (EN 141)

Respiratory protection : Spray application - outdoor: Half mask with combination filter A2/P3 (EN 141)

Respiratory protection : Spray application - indoor: Half mask with combination filter A2/P3 (EN 141)

Hand protection : Material: Nitrile rubber
Glove thickness: 0,4 - 0,7 mm
Glove length
: Gauntlets

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Protection index: Class 6

Wearing time: > 480 min

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it., 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., Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough., Before removing gloves clean them with soap and water.

Eye protection : Safety glasses with side-shields conforming to EN166

Skin and body protection : Manufacturing and processing work: Full protective clothing Type 6 (EN 13034)

Mixer and loaders must wear: Full protective clothing Type 5 + 6 (EN ISO 13982-2 / EN 13034) Rubber apron Rubber or plastic boots



Spray application - outdoor: Full protective clothing Type 3 (EN 14605) Rubber or plastic boots

Spray application - indoor: Full protective clothing Type 3 (EN 14605) Rubber or plastic boots

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing. Keep working clothes separately. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin, eyes and clothing. Avoid exposure to vapor. Wash hands and face before breaks and immediately after handling the product. When using do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. Remove clothing/PPE immediately if material gets inside. 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 : 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid,
 Colour : green,
 Odour : slight, sulphurous,
 pH : 3,6 at 10 g/l (25 °C)
 Solidification point : -5 °C

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Boiling point/boiling range	: Not available for this mixture.
Flash point	: 23 °C
Oxidizing properties	: The product is not oxidizing.
Explosive properties	: Not explosive
Density	: 0,966 g/cm ³ at 20 °C
Solubility/qualitative	: completely miscible
Viscosity, dynamic	: 2 - 2,2 mPa.s at 25 °C

10. STABILITY AND REACTIVITY

Conditions to avoid	: Processing temperature : > 130 °C Protect from frost.
Materials to avoid	: Incompatible with oxidizing agents.
Hazardous decomposition products	: Heating can release vapours which can be ignited.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50/ ratmale: 10 mg/kg Method: OECD Test Guideline 401 (Data on the product itself) Information source: Internal study report LD50/ ratfemale: 9 mg/kg Method: OECD Test Guideline 401 (Data on the product itself) Information source: Internal study report
Acute inhalation toxicity	: LC50/ 4 h / rat : 0,3 mg/l Method: OECD Test Guideline 403 (Data on the product itself) Information source: Internal study report
Acute dermal toxicity	: LD50/ rabbit > 5 000 mg/kg Method: OECD Test Guideline 402 (Data on the product itself) Information source: Internal study report
Skin irritation	: rabbit Result: No skin irritation Method: OECD Test Guideline 404 (Data on the product itself) Information source: Internal study report
Eye irritation	: rabbit Result: No eye irritation Method: OECD Test Guideline 405 (Data on the product

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- itself) Information source: Internal study report
- Sensitisation : guinea pig Result: Animal test did not cause sensitization by skin contact. Method: OECD Test Guideline 406 (Data on the product itself) Information source: Internal study report
- Mutagenicity assessment
Oxamyl : Did not cause genetic damage in animals., Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
- Carcinogenicity assessment
• Oxamyl : Did not show carcinogenic effects in animal experiments.
- Toxicity to reproduction assessment
• Oxamyl : Animal testing showed effects on reproduction at levels equal to or above those causing parental toxicity.

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

- Biodegradability : Not readily biodegradable. Estimation based on data obtained on active ingredient.
- Bioaccumulation : This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Ecotoxicity effects

- Toxicity to fish : LC50/ 96 h/ Oncorhynchus mykiss (rainbow trout) :: 12,4 mg/l (Data on the product itself) Information source: Internal study report
- Toxicity to algae
• Oxamyl : / EbC50/ 72 h/ Pseudokirchneriella subcapitata (green algae): 1,0 mg/l
/ EC50/ 336 h/ Lemna gibba (duckweed): 30,0 mg/l
- Toxicity to daphnia : / EC50/ 48 h/ Daphnia: 1,95 mg/l (Data on the product itself) Information source: Internal study report

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.

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14. TRANSPORT INFORMATION**ADR**

Class: 6.1
 Packaging group: II
 Classification Code: TF2
 HI No.: 63
 UN number: 2991
 Labelling No.: 6.1, 3
 Proper shipping name: Carbamate pesticide, liquid, toxic, flammable (Methanol, Oxamyl)

IMDG

Class: 6.1
 Packaging group: II
 UN number: 2991
 Labelling No.: 6.1, 3
 Proper shipping name: Carbamate pesticide, liquid, toxic, flammable (Methanol, Oxamyl, Oxamyl)

Marine pollutant: Marine pollutant

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

Symbol(s)	: T+	Very toxic
Hazardous components:	Methanol Oxamyl	
R-phrases(s)	: R10 R28 R23 R39/23/24/25 R51/53	Flammable. Very toxic if swallowed. Toxic by inhalation. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrases(s)	: S 1/2 S13 S20/21 S23 S28 S35 S36/37/39 S38 S45 S57	Keep locked up and out of the reach of children. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. Do not breathe spray, vapour. After contact with skin, wash immediately with plenty of water. This material and its container must be disposed of in a safe way. Wear suitable protective clothing, gloves and eye/face protection. In case of insufficient ventilation, wear suitable respiratory equipment. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Use appropriate container to avoid environmental

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SP 1	contamination. 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 mixtures : To avoid risks to man and the environment, comply with the instructions for use.

Other regulations : Restricted to professional users.

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

R11	Highly flammable.
R21	Harmful in contact with skin.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R26/28	Also very toxic by inhalation and if swallowed.
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R51	Toxic to aquatic organisms.
R53	May cause long-term adverse effects in the aquatic environment.

Further information

Before use read DuPont's safety 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.

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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.