

SAFETY DATA SHEET



Vydate® C-LV

Version 1.1 Revision Date: 06/01/2023 SDS Number: 800080000913 Date of last issue: 01/13/2023
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Corteva Agriscience™ encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container. This Safety Data Sheet adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. IDENTIFICATION

Product name : Vydate® C-LV

Manufacturer or supplier's details

COMPANY IDENTIFICATION

Manufacturer/importer : CORTEVA AGRISCIENCE LLC
9330 ZIONSVILLE RD
INDIANAPOLIS, IN, 46268-1053
UNITED STATES

Customer Information Number : 1-800-258-3033
E-mail address : customerinformation@corteva.com

Emergency telephone : INFOTRAC (CONTRACT 84224).
+1 800-992-5994 or +1 317-337-6009

Recommended use of the chemical and restrictions on use

Recommended use : Insecticide
Nematicide

Restrictions on use : Do not use product for anything outside of the above specified uses.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids : Category 3

Acute toxicity (Oral) : Category 2

SAFETY DATA SHEET



Vydate® C-LV

Version 1.1 Revision Date: 06/01/2023 SDS Number: 800080000913 Date of last issue: 01/13/2023
Date of first issue: 01/13/2023

Acute toxicity (Inhalation) : Category 2
Eye irritation : Category 2A
Specific target organ toxicity - single exposure : Category 3 (Respiratory system, Central nervous system)

GHS label elements

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : H226 Flammable liquid and vapor.
H300 + H330 Fatal if swallowed or if inhaled.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.

Precautionary Statements : **Prevention:**
P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe mist or vapors.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ eye protection/ face protection.
P284 Wear respiratory protection.

Response:

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

Vydate® C-LV

Version 1.1 Revision Date: 06/01/2023 SDS Number: 800080000913 Date of last issue: 01/13/2023
 Date of first issue: 01/13/2023

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P403 + P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
oxamyl (ISO)	23135-22-0	42
cyclohexanone	108-94-1	>= 25 - <= 29
Balance	Not Assigned	>= 29 - <= 33

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

- 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 1-888-226-8832. See Label for Additional Precautions and Directions for Use.
 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.
- If inhaled : Move to fresh air.
 If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
 Call a poison control center or doctor for treatment advice.
- In case of 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.
- In case of eye contact : Hold eye open and rinse slowly and gently with water for 15-20 minutes.

Vydate® C-LV

Version	Revision Date:	SDS Number:	Date of last issue: 01/13/2023
1.1	06/01/2023	800080000913	Date of first issue: 01/13/2023

- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
Call a poison control center or doctor for treatment advice.
- If swallowed : If swallowed, call a poison control center or doctor 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.
Do not give anything to drink.
- Most important symptoms and effects, both acute and delayed : Poisoning produces effects associated with anticholinesterase activity which may include:
Weakness
blurred vision
Breathing difficulties
Nausea
Headache
Abdominal pain
discomfort in the chest
constriction of pupils
slow pulse
Sweating
muscle twitching
- Notes to physician : Administer atropine sulphate as an antidote until complete atropinisation (1.2-2.0 mg i.v. every 10-30 minutes).
Artificial respiration and/or oxygen may be necessary.
Allow no further exposure to any cholinesterase inhibitor until full recovery is assured.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : Do not use direct water stream.
High volume water jet
- Specific hazards during fire fighting : Exposure to combustion products may be a hazard to health.
Vapors may form explosive mixtures with air.
Do not allow run-off from fire fighting to enter drains or water courses.
Flash back possible over considerable distance.
- Hazardous combustion products : During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.
- Specific extinguishing meth- : Remove undamaged containers from fire area if it is safe to do

Vydate® C-LV

Version	Revision Date:	SDS Number:	Date of last issue: 01/13/2023
1.1	06/01/2023	800080000913	Date of first issue: 01/13/2023

- ods so.
Evacuate area.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
- Further information : Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed.
Do not use a solid water stream as it may scatter and spread fire.
Use a water spray to cool fully closed containers.
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.
- Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.
Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Remove all sources of ignition.
Use personal protective equipment.
Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
- Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.
Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g., by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.
Prevent from entering into soil, ditches, sewers, underwater.
See Section 12, Ecological Information.
- Methods and materials for containment and cleaning up : Clean up remaining materials from spill with suitable absorbent.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in.
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped,
Recovered material should be stored in a vented container.
The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to over-pressurization of the container.

Vydate® C-LV

Version	Revision Date:	SDS Number:	Date of last issue: 01/13/2023
1.1	06/01/2023	800080000913	Date of first issue: 01/13/2023

Wipe up with absorbent material (e.g. cloth, fleece).
 Neutralize with chalk, alkali solution or ammonia.
 Non-sparking tools should be used.
 Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
 Suppress (knock down) gases/vapors/mists with a water spray jet.
 See Section 13, Disposal Considerations, for additional information.

SECTION 7. HANDLING AND STORAGE

- Local/Total ventilation : Use with local exhaust ventilation.
 Use only in an area equipped with explosion proof exhaust ventilation.
- Advice on safe handling : Avoid formation of aerosol.
 Non-sparking tools should be used.
 Provide sufficient air exchange and/or exhaust in work rooms.
 Open drum carefully as content may be under pressure.
 Do not breathe vapors/dust.
 Do not smoke.
 Handle in accordance with good industrial hygiene and safety practice.
 Avoid exposure - obtain special instructions before use.
 Smoking, eating and drinking should be prohibited in the application area.
 Do not breathe vapors or spray mist.
 Do not get in eyes.
 Avoid contact with skin and eyes.
 Avoid prolonged or repeated contact with skin.
 Keep container tightly closed.
 Keep away from heat and sources of ignition.
 Take precautionary measures against static discharges.
 Take care to prevent spills, waste and minimize release to the environment.
 Mix thoroughly before use.
 Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
- Conditions for safe storage : Store in a closed container.
 No smoking.
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.
 Keep in properly labeled containers.
 Keep tightly closed.
 Store in accordance with the particular national regulations.
- Materials to avoid : Do not store near acids.
 Strong oxidizing agents
 Organic peroxides
 Flammable solids

SAFETY DATA SHEET



Vydate® C-LV

Version 1.1 Revision Date: 06/01/2023 SDS Number: 800080000913 Date of last issue: 01/13/2023
 Date of first issue: 01/13/2023

Pyrophoric liquids
 Self-heating substances and mixtures
 Substances and mixtures which in contact with water emit flammable gases
 Explosives
 Gases

Recommended storage temperature : > 40 °F / > 4 °C

Packaging material : Unsuitable material: None known.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
oxamyl (ISO)	23135-22-0	TWA	0.05 mg/m ³	Corteva OEL
		STEL	0.15 mg/m ³	Corteva OEL
cyclohexanone	108-94-1	TWA	50 ppm 200 mg/m ³	OSHA Z-1
		TWA	25 ppm 100 mg/m ³	OSHA P0

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
cyclohexanone	108-94-1	1,2-Cyclohexanediol	Urine	End of shift at end of work-week	80 mg/l	ACGIH BEI
		Cyclohexanol	Urine	End of shift (As soon as possible after exposure ceases)	8 mg/l	ACGIH BEI

Engineering measures : Human Flaggers must be in enclosed cabs.

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

Use only with adequate ventilation.

Vydate® C-LV

Version 1.1 Revision Date: 06/01/2023 SDS Number: 800080000913 Date of last issue: 01/13/2023
 Date of first issue: 01/13/2023

Personal protective equipment

- Respiratory protection : Mixers, loaders, applicators and other handlers must wear:
 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.
- Hand protection
- Remarks : Protective gloves
- Eye protection : Wear protective eyewear to prevent contact with this substance.
- Skin and body protection : 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 made of any waterproof material
 Shoes plus socks
 Mixers, loaders, applicators and other handlers must wear:
 Coveralls worn over long-sleeved shirt and long pants
 Chemical-resistant gloves
 Barrier laminate
 butyl-rubber
 Chemical resistant footwear plus socks
 Protective eyewear
 Chemical resistant headgear for overhead exposure
 Chemical resistant apron when mixing, loading, or cleaning equipment or spills.
- 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.
- Hygiene measures : Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
 Remove clothing/PPE immediately if material gets inside.
 Wash thoroughly and put on clean clothing.
 Remove personal protective equipment immediately after handling this product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

SAFETY DATA SHEET



Vydate® C-LV

Version 1.1 Revision Date: 06/01/2023 SDS Number: 800080000913 Date of last issue: 01/13/2023
Date of first issue: 01/13/2023

Appearance : liquid

Color : blue

Odor : unpleasant, solvent

Odor Threshold : No data available

pH : 3

Melting point/range : Not applicable

Freezing point : No data available

Boiling point/boiling range : No data available

Flash point : 125.1 °F / 51.7 °C
Method: closed cup

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapor pressure : 18.795 hPa (68 °F / 20 °C)

Relative vapor density : No data available

Relative density : 1.09 (77 °F / 25 °C)

Density : 1.088 g/cm³

Bulk density : 480.6 - 608.7 kg/m³ (77 °F / 25 °C)

Solubility(ies)
Water solubility : Miscible

Autoignition temperature : No data available

Viscosity
Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Vydate® C-LV

Version 1.1 Revision Date: 06/01/2023 SDS Number: 800080000913 Date of last issue: 01/13/2023
Date of first issue: 01/13/2023

SECTION 10. STABILITY AND REACTIVITY

- Reactivity : Not classified as a reactivity hazard.
- Chemical stability : No decomposition if stored and applied as directed.
Stable under normal conditions.
- Possibility of hazardous reactions : Stable under recommended storage conditions.
No hazards to be specially mentioned.
Vapors may form explosive mixture with air.
May form explosive dust-air mixture.
- Conditions to avoid : Heat, flames and sparks.
- Incompatible materials : None.
- Hazardous decomposition products : Decomposition products depend upon temperature, air supply and the presence of other materials.
-

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

- Acute oral toxicity : LD50 (Rat, male and female): 9.1 mg/kg
- Acute inhalation toxicity : LC50 (Rat): 0.11 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
- Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Components:**oxamyl (ISO):**

- Acute oral toxicity : LD50 (Rat, male): 3.1 mg/kg
Symptoms: central nervous system effects
- LD50 (Rat, female): 2.5 mg/kg
Symptoms: central nervous system effects
- Acute inhalation toxicity : LC50 (Rat): 0.056 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

cyclohexanone:

- Acute oral toxicity : LD50 (Rat): 1,890 mg/kg
- Acute inhalation toxicity : Acute toxicity estimate (Rat): 11 mg/l
Exposure time: 4 h

Vydate® C-LV

Version 1.1 Revision Date: 06/01/2023 SDS Number: 800080000913 Date of last issue: 01/13/2023
Date of first issue: 01/13/2023

Test atmosphere: vapor
Method: Expert judgment
Target Organs: Respiratory system

Acute dermal toxicity : LD50 (Rabbit): 1,977 mg/kg

Skin corrosion/irritation**Product:**

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

Components:**oxamyl (ISO):**

Species : Rabbit
Exposure time : 72 h
Method : OECD Test Guideline 404
Result : No skin irritation

cyclohexanone:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation

Serious eye damage/eye irritation**Product:**

Species : Rabbit
Result : Eye irritation

Components:**oxamyl (ISO):**

Species : Rabbit
Result : No eye irritation
Exposure time : 72 h
Method : OECD Test Guideline 405

cyclohexanone:

Species : Rabbit
Result : Corrosive

Respiratory or skin sensitization**Product:**

Species : Guinea pig
Result : Does not cause skin sensitization.

SAFETY DATA SHEET



Vydate® C-LV

Version 1.1 Revision Date: 06/01/2023 SDS Number: 800080000913 Date of last issue: 01/13/2023
Date of first issue: 01/13/2023

Components:

oxamyl (ISO):

Test Type : Buehler Test
Species : Guinea pig
Method : US EPA Test Guideline OPP 81-6
Result : Does not cause skin sensitization.

cyclohexanone:

Test Type : Maximization Test
Species : Guinea pig
Assessment : Does not cause skin sensitization.

Germ cell mutagenicity

Components:

oxamyl (ISO):

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative., In vivo tests did not show mutagenic effects

cyclohexanone:

Germ cell mutagenicity - Assessment : In vitro genetic toxicity studies were negative.

Carcinogenicity

Components:

oxamyl (ISO):

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

cyclohexanone:

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Components:

oxamyl (ISO):

Reproductive toxicity - As- : In animal studies, did not interfere with reproduction.

SAFETY DATA SHEET



Vydate® C-LV

Version 1.1 Revision Date: 06/01/2023 SDS Number: 800080000913 Date of last issue: 01/13/2023
Date of first issue: 01/13/2023

assessment Did not cause birth defects or any other fetal effects in laboratory animals.

cyclohexanone:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Did not cause birth defects or any other fetal effects in laboratory animals.

STOT-single exposure

Components:

oxamyl (ISO):

Target Organs : Central nervous system
Assessment : May cause drowsiness or dizziness.

cyclohexanone:

Routes of exposure : Inhalation
Target Organs : Respiratory system
Assessment : May cause respiratory irritation.

STOT-repeated exposure

Components:

oxamyl (ISO):

Assessment : Evaluation of available data suggests that this material is not an STOT-RE toxicant.

Repeated dose toxicity

Components:

oxamyl (ISO):

Remarks : Based on available data, repeated exposures are not expected to cause significant adverse effects except at very high aerosol concentrations. Repeated excessive aerosol exposures may cause respiratory tract irritation and even death. cholinesterase inhibition

cyclohexanone:

Species : Rat
 : 407 mg/kg
Application Route : Ingestion
Exposure time : 90 d
Method : OECD Test Guideline 408
Remarks : Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Vydate® C-LV

Version 1.1 Revision Date: 06/01/2023 SDS Number: 800080000913 Date of last issue: 01/13/2023
Date of first issue: 01/13/2023

Aspiration toxicity**Product:**

Based on physical properties, not likely to be an aspiration hazard.

Components:**oxamyl (ISO):**

Based on physical properties, not likely to be an aspiration hazard.

cyclohexanone:

Based on physical properties, not likely to be an aspiration hazard.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****oxamyl (ISO):**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 3.13 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.319 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
- Toxicity to algae/aquatic plants : NOEC (Pseudokirchneriella subcapitata (green algae)): 1.01 mg/l
Exposure time: 120 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes
- ErC50 (Pseudokirchneriella subcapitata (green algae)): 2.61 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
- EC50 (Lemna gibba (duckweed)): 30.0 mg/l
End point: Frond
Exposure time: 336 h
Test Type: static test
Method: US EPA Test Guideline OPP 122-2 & 123-2
GLP: yes
- EC50 (Lemna gibba (duckweed)): 32.3 mg/l
End point: Biomass
Exposure time: 336 h
Test Type: static test

SAFETY DATA SHEET



Vydate® C-LV

Version 1.1 Revision Date: 06/01/2023 SDS Number: 800080000913 Date of last issue: 01/13/2023
Date of first issue: 01/13/2023

Method: US EPA Test Guideline OPP 122-2 & 123-2
GLP: yes

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0.77 mg/l
Exposure time: 61 d
Test Type: Early Life-Stage
Method: US EPA Test Guideline OPP 72-4

NOEC (Cyprinodon variegatus (sheepshead minnow)): 0.356 mg/l
Exposure time: 29 d
Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.0268 mg/l
Exposure time: 21 d
Test Type: flow-through test
Method: OECD Test Guideline 202

NOEC (Americamysis bahia (mysid shrimp)): 0.0189 mg/l
Exposure time: 28 d

Toxicity to soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): 112 parts per million
Exposure time: 14 d

Toxicity to terrestrial organisms : LD50 (Colinus virginianus (Bobwhite quail)): 9.5 mg/kg
Method: US EPA Test Guideline OPPTS 850.2100

LC50 (Anas platyrhynchos (Mallard duck)): 766 mg/kg
Exposure time: 8 d
Method: US EPA Test Guideline OPP 71-2

LD50 (Apis mellifera (bees)): 0.38 µg/l
Exposure time: 48 h
Method: OEPP/EPPO Test Guideline 170

LD50 (Apis mellifera (bees)): 0.47 µg/l
Exposure time: 48 h
Method: OEPP/EPPO Test Guideline 170

Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

cyclohexanone:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 527 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 800 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h
Remarks: For similar material(s):

NOEC (Desmodesmus subspicatus (green algae)): > 100 mg/l

Vydate® C-LV

Version	Revision Date:	SDS Number:	Date of last issue: 01/13/2023
1.1	06/01/2023	800080000913	Date of first issue: 01/13/2023

Exposure time: 72 h
Remarks: For similar material(s):

Persistence and degradability**Components:****oxamyl (ISO):**

Biodegradability : Result: Not readily biodegradable.

cyclohexanone:

Biodegradability : Result: Biodegradable

Bioaccumulative potential**Components:****oxamyl (ISO):**

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: -0.44
pH: 5

cyclohexanone:

Partition coefficient: n-octanol/water : log Pow: 0.81

Balance:

Partition coefficient: n-octanol/water : Remarks: No relevant data found.

Mobility in soil**Components:****Balance:**

Distribution among environmental compartments : Remarks: No relevant data found.

Other adverse effects**Components:****Balance:**

Results of PBT and vPvB assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

SAFETY DATA SHEET



Vydate® C-LV

Version 1.1 Revision Date: 06/01/2023 SDS Number: 800080000913 Date of last issue: 01/13/2023
Date of first issue: 01/13/2023

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.
If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 2991
Proper shipping name : CARBAMATE PESTICIDE, LIQUID, TOXIC, FLAMMABLE (Oxamyl, Cyclohexanone)
Class : 6.1
Subsidiary risk : 3
Packing group : II
Labels : 6.1 (3)

IATA-DGR

UN/ID No. : UN 2991
Proper shipping name : Carbamate pesticide, liquid, toxic, flammable (Oxamyl, Cyclohexanone)
Class : 6.1
Subsidiary risk : 3
Packing group : II
Labels : Toxic, Flammable Liquids
Packing instruction (cargo aircraft) : 662
Packing instruction (passenger aircraft) : 654

IMDG-Code

UN number : UN 2991
Proper shipping name : CARBAMATE PESTICIDE, LIQUID, TOXIC, FLAMMABLE (Oxamyl, Cyclohexanone)
Class : 6.1
Subsidiary risk : 3
Packing group : II
Labels : 6.1 (3)
EmS Code : F-E, S-D
Marine pollutant : yes(Oxamyl)
Remarks : Stowage category B

SAFETY DATA SHEET



Vydate® C-LV

Version 1.1 Revision Date: 06/01/2023 SDS Number: 800080000913 Date of last issue: 01/13/2023
Date of first issue: 01/13/2023

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

UN/ID/NA number : UN 2991
Proper shipping name : Carbamate pesticides, liquid, toxic, flammable (Oxamyl, Cyclohexanone)
Class : 6.1
Subsidiary risk : 3
Packing group : II
Labels : TOXIC, FLAMMABLE LIQUID
ERG Code : 131
Marine pollutant : no
Reportable Quantity : Oxamyl only regulated in pack sizes > 108 kg

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Acute toxicity (any route of exposure)
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

SARA 313 : 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.

US State Regulations

Pennsylvania Right To Know

oxamyl (ISO) 23135-22-0
cyclohexanone 108-94-1

The ingredients of this product are reported in the following inventories:

TSCA : Product contains substance(s) not listed on TSCA inventory.

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

Federal Insecticide, Fungicide and Rodenticide Act

EPA Registration Number : 352-532

Vydate® C-LV

Version	Revision Date:	SDS Number:	Date of last issue: 01/13/2023
1.1	06/01/2023	800080000913	Date of first issue: 01/13/2023

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

DANGER
Poison

Fatal if swallowed.
Corrosive
CAUSES IRREVERSIBLE EYE DAMAGE.
May be fatal if inhaled.

SECTION 16. OTHER INFORMATION
Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

Full text of other abbreviations

ACGIH BEI	:	ACGIH - Biological Exposure Indices (BEI)
Corteva OEL	:	Corteva Occupational Exposure Limit
OSHA P0	:	USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
Corteva OEL / STEL	:	Short Term Exposure Limit (STEL):
Corteva OEL / TWA	:	Time Weighted Average (TWA)
OSHA P0 / TWA	:	8-hour time weighted average
OSHA Z-1 / TWA	:	8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New

SAFETY DATA SHEET



Vydate® C-LV

Version	Revision Date:	SDS Number:	Date of last issue: 01/13/2023
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Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 06/01/2023

Product code: GF-4080

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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