

In 2000, following an extensive safety evaluation, the U.S. Environmental Protection Agency (EPA) reauthorized oxamyl for a variety of uses, including the application of DuPont™ Vydate® C-LV on potatoes. When Vydate® C-LV is applied at labeled rates via in-furrow,* chemigation and foliar application methods, the occupational safety evaluations using the U.S. Pesticide Handlers Exposure Database show a high degree of safety to growers/applicators.

Relative toxicity

Oxamyl, the active ingredient in Vydate® C-LV, is a carbamate insecticide. It inhibits acetylcholinesterase, an enzyme that functions in nerve impulse transmissions. Acetylcholinesterase inhibition is the mode-of-action for organophosphate insecticides and for other carbamates. However, for oxamyl and other carbamates the inhibition is reversible. This helps birds, animals, and humans recover from low level exposures to oxamyl.

- **Dermal Toxicity** (EPA Category IV, the least toxic products): Contact with the skin, particularly to the hands, is the most likely source of exposure. Vydate® C-LV does not cause skin irritation or skin sensitization. Minimize the potential for exposure by wearing gloves and other recommended PPE.
- **Oral Toxicity** (EPA Category I, the most toxic products): A less likely source of exposure is oral ingestion. Minimize the potential for oral exposure by wearing chemical-resistant gloves during handling operations and by washing hands before eating, drinking, chewing gum, using tobacco or using the toilet, as directed by the product label.
- **Inhalation Toxicity** (EPA Category II, toxic, but not among the most toxic products): Exposure can occur by breathing small droplets dispersed in the air during the application of dilute spray solutions in the field (including overhead sprinkler chemigation) or during the opening of and pouring from containers while mixing/loading. Minimize the potential for inhalation exposure of small droplets by using the Vydate® C-LV returnable keg and closed transfer system during mixing/loading, and an enclosed cab during in-furrow spray applications. If neither is available, use a properly fitted respirator during both operations. Vydate® C-LV formulations do not produce a significant concentration of oxamyl (the active ingredient) vapors at temperatures encountered in the field. **The characteristic odor commonly associated with Vydate® C-LV is**

not the result of oxamyl, but rather a solvent (cyclohexanone) present in the formulation. Therefore, smelling Vydate® C-LV does not indicate an inhalation exposure to oxamyl, the active ingredient in Vydate® C-LV.

- **Eye and Skin Irritation:** Vydate® C-LV does not cause skin irritation or skin sensitization (EPA Category IV, among the least toxic compounds). Vydate® C-LV does cause eye irritation (EPA Category I), and is highly toxic if droplets enter the eyes. Minimize potential for exposure to eyes by wearing protective eyewear as recommended on the product label during open air operations. **Protective eyewear is required with the use of the Vydate® C-LV returnable keg and the DuPont supplied closed transfer system because the system is operated under pressure.**

For more information

Contact your local DuPont crop protection retailer or DuPont representative to learn more about Vydate® C-LV insecticide. And visit us on the Web at vydateclv.dupont.com.



DuPont™ Vydate® C-LV

insecticide/nematicide

Protect your crop. Protect yourself.



** Vydate® C-LV is not labeled for in-furrow soil applications in the Northeast or mid-Atlantic states.*

Vydate® C-LV is a restricted-use pesticide.

This reference guide is not intended as a substitute for the product label for the product(s) referenced herein. Product labels for the above product(s) contain important precautions, directions for use and product warranty and liability limitations that must be read before using the product. Applicators must be in possession of the product label(s) at the time of application. Always read and follow all label directions and precautions for use when using any pesticide alone or in tank mix combinations.

The DuPont Oval Logo, DuPont™, The miracles of science™ and Vydate® are trademarks or registered trademarks of DuPont or its affiliates.

Copyright © 2005-2009 E.I. du Pont de Nemours and Company.

All Rights Reserved. 1/09

Reorder No.: K-15035 (Replaces K-09302)



The miracles of science™



The miracles of science™

DuPont™ Vydate® C-LV is a valuable insect management tool that plays a critical role in potato production. As with any tool, the keys to preventing potential adverse effects when using the product are to follow the label for safe use and handling and to look for ways to minimize the potential of exposure.

This guide was developed to provide information you need for taking the appropriate safeguards to protect yourself while working with or applying Vydate® C-LV.

Limit exposure during mixing/loading

Growers who choose Vydate® C-LV insecticide/nematicide in the returnable keg can use the closed transfer system to minimize the exposure during mixing/loading operations. The returnable keg also eliminates the need for container rinsing, an additional potential source of exposure.

The Worker Protection Standard allows for reduced Personal Protective Equipment (PPE) during handling (mixing/loading) if a closed transfer system is used.



When using a closed transfer system the required PPE is reduced to:

- Long-sleeved shirt and long pants.
- Shoes and socks.
- Chemical-resistant apron.
- Chemical-resistant gloves, such as barrier laminate or butyl rubber.
- Eye protection (if the closed transfer system is under pressure).
- **Although a respirator and other labeled PPE are not required, these items must be kept nearby in case of an emergency.**

DuPont supplies closed transfer systems for Vydate® C-LV that use a 12-volt pump. Although these systems are “closed,” the product is transferred under low pressure. As a result, eye protection is required.

Limit exposure during application

- Do not stand near or downwind of a sprayer or overhead sprinkler when the product is being applied.
- Turn off the sprayer and wear gloves, recommended personal protective equipment and eye protection when making adjustments or repairs.



Shown here is the full Personal Protective Equipment (PPE) required for mixing and loading Vydate® C-LV.



- Use a tractor with an enclosed cab.

If the enclosed cab has a properly functioning ventilation system that is used and maintained in accordance with the manufacturer’s written operating instructions and is declared in writing by the manufacturer or by a governmental agency to provide respiratory protection equal to or greater than the vapor- or gas-removing respirator specified on the Vydate® C-LV label, the required PPE is reduced to:



- Long-sleeved shirt and long pants.
- Shoes and socks.

Although a respirator and other labeled PPE are not required, these items must be kept in the cab. The full PPE specified on the label is required when making adjustments or repairs to the application equipment while Vydate® C-LV is in the system.



Limit exposure during overhead sprinkler chemigation

When applying Vydate® C-LV to potatoes through an overhead sprinkler irrigation system:

- Turn off end guns treating nontarget areas.
- Turn off or plug nozzles in the immediate area of wells, control panels, chemical supply tanks, and system safety devices.
- If a closed transfer system is used only the reduced PPE (as described for Mixing/Loading) is required for filling the chemigator.
- The full PPE specified on the label is required when making adjustments or repairs to the irrigation system or if working within the range of a sprinkler while Vydate® C-LV is in the water.

The facts about DuPont™ Vydate® C-LV

- Broad-spectrum insecticide/nematicide.
- Controls many pest species that can cause substantial damage to potato crops.