

Paraquat use in Vermont

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Vermont Agency of Agriculture, Food & Markets

- Registered Products
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Products Registered in Vermont

Product Name	EPA Reg. No.	Registration Status	Company
Gramoxone SL 3.0	100-1652	Registered	Syngenta Crop Protection Inc
Crop Protect Direct Paraquat 3SL	101458-2	Registered	Jabco LLC
Omni Brand Paraquat	5905-637	Registered	Helena Agri Enterprises LLC dba Helena Chemical Co
Helmquat 3SL	74530-48	Registered	Helm Agro Us Inc
Paraquat Concentrate	82542-3	Registered	Source Dynamics Llc
Paraquat 43.2% SL	85678-58	Registered	RedEagle International LLC
Paraquat 3SL	87290-35	Registered	Generic Crop Science LLC c/o Willowood LLC
Axill Solutions Paraquat 3SL	93809-4	Registered	Axill Solutions LLC
Paraq	34704-1117	D2 2024	Loveland Product Inc
Parazone 3SL Herbicide	5481-615	D2 2025	Amvac Chemical

Commercial/Non-commercial applicator Use Reported

YEAR	Amount	County
2019	No Reported Use	
2020	18 Gallons	Windham County
2021	No Reported Use	
2022	250 Gallons	Addison County
2023	No Reported Use	
2024	No Reported Use	

2023 Reported Sales	
County	Gallons
Orange	2.5
Windham	2
Windsor	10
total	14.5

2024 Reported Sales	
County	Gallons
Orange	2.5
Windsor	12.5
Chittenden	5
Addison	45
Bennington	40
Franklin	2.5
total	107.5

2025 Reported Sales	
County	Gallons
Orange	2.5
Windsor	10
Chittenden	10
Addison	67.5
Bennington	30
Franklin	2.5
Rutland	2.5
total	125

No complaints or investigations
involving paraquat since 2016

Risk Reduction Measures

- Certified Applicators Only
- Required additional training
- No residential area or recreational area uses
- Increased PPE
- Closed System Transfer

Applicators:

- **When applying to 80 acres or less in a 24-hour period, if not using an enclosed cab**, applicators must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

- **When applying to more than 80 acres in a 24-hour period, applications must be made using an enclosed cab.** Enclosed cabs must have a nonporous barrier that totally surrounds occupant and prevents contact with pesticides outside of the cab.

Mixers and Loaders must wear:

- Long-sleeve shirt and long pants
- Shoes plus socks
- Waterproof gloves, except wear chemical-resistant gloves (Barrier Laminate, Nitrile Rubber \geq 14 mils, Neoprene Rubber \geq 14 mils, or Viton™ \geq 14 mils gloves) when mixed with oil
- Wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.
- Chemical-resistant apron
- Face shield



Risk Reduction Measures

Closed Transfer System



For containers less than 120 gallons

This product must only be removed from the original container with a closed transfer system. Any subsequent transfer of this product must utilize a closed transfer system.

Any attempt to circumvent the closed transfer system prior to complete removal of the product and rinsing of the product container as described in the Storage and Disposal Section of this label is prohibited.

Revised volatilization data

Syngenta Crop Protection submitted a new paraquat vapor pressure study in January 2024 under Section 6(a)(2) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

October 2025 -Volatilization potential of paraquat in field use situations (EPA-HQ-OPP-2011-0855-0554)
 : <https://www.epa.gov/pesticides/epa-updates-review-potential-paraquat-volatilization-and-plans-request-additional-data>

Herbicide / Reference Chemicals	Vapor Pressure at 20°C (mPa)	Vapor Pressure Interpretations	
		EPA	FFSA
<i>Herbicides highlighted in orange</i>			
Carbon Dioxide gas	-	Intermediate to High Volatility	Highly Volatile
Chlorine gas	-		
Methane gas	-		
Oxygen gas	-		
Propane	841,261,820		
Ammonia	586,616,800		
Butane	202,649,440		
General Anesthetic -Diethyl Ether	71,593,914		
Acetone	30,664,060		
Benzene	12,665,590		
Ethanol	7,865,998	Moderate Volatility	
Acetic acid (NOP)	1,570,000		
Laundry Fragrance -Limonene	200,000		
Laundry Fragrance -Linalool	20,000		
Laundry Fragrance -Benzyl acetate	10,000		
Antifreeze-Ethylene glycol	8,000		
Glycerin	1,300		
Pelargonic acid "fatty acid"	452		
Vegetable oil	100		
Pendimethalin	3.3		Low Volatility
Metolachlor	1.7		
Dicamba	1.7		
Clopyralid	1.4		
Paraquat 2025 ^c	0.4		
MCPA	0.4		
Atrazine	0.04		
Glufosinate	0.03		
Hexazinone	0.03		
Oxyfluorfen	0.03		
Halosulfuron-methyl	0.01	Relatively Non-volatile	
Glyphosate	0.01		
Imazapyr	0.01		
Diquat dibromide	0.01		
2,4-D	0.01		
Mesotrione	0.01		
Bicyclopyrone	0.01		
Paraquat 2019 ^b	0.0001		
Rimsulfuron	0.0009		
Aminopyralid	0.00003		
Indaziflam	0.00003	< 0.13 mPa	
Paraquat 2011 ^a	0.0000000002		
Citric acid	0		
Sucrose	0		
Sodium chloride (table salt)	0	< 5 mPa	
Corn gluten meal (NOP)	-		

NOP= National Organic Program; these chemicals are approved for use in organic agriculture

Paraquat registrations – future considerations

Data Call In – EPA

To resolve the uncertainty around the volatilization potential of paraquat, EPA will issue a Data-Call In (DCI) notice to paraquat manufacturers under the authority of FIFRA section 3(c)(2)(B).

EPA follows the review and approval process through the Office of Management and Budget which is needed prior to release of the DCI. Once the data is received and reviewed by EPA, an updated analysis will be performed and published as part of the ongoing registration review process for paraquat along with any possible refinements of EPA's bystander inhalation exposures analysis.

Syngenta Announcement – March 3, 2026



March 3, 2026

Dear Valued Customer,

At Syngenta, we are facing a challenging and important product market environment.

As part of our strategic investment portfolio, we are focused on ensuring the highest quality and profitability of our business.

For more information, please contact your local extension service representative.

After several years of continued investment and careful evaluation, we have reached the conclusion that Gramoxone® is no longer financially viable within our portfolio. This decision is based solely on business and financial considerations and is not related to any regulatory or legal action.

We will continue to sell Gramoxone® Herbicide at current pricing while supplies last, or until December 31, 2026, whichever occurs first.

If you have questions or would like assistance in evaluating alternative solutions, please contact your Syngenta representative. We remain fully committed to working with you to identify options that support the productivity, quality, and profitability of your business.

Thank you for your continued confidence in and support of the Syngenta portfolio.

Sincerely,

Jeff Cecil
Head, Crop Protection Marketing

© 2026 Syngenta. Important: Always read and follow label instructions. Some products may not be registered for sale or use in all states or countries. Please check with your local extension service to ensure registration status. Gramoxone SL 3.0 is a Restricted Use Pesticide. For use by certified applicators only. Gramoxone® and the Syngenta logo are registered trademarks of a Syngenta Group Company.

Paraquat registrations – future considerations: Label Required Training -

2.2.4 ADDITIONAL CERTIFIED APPLICATOR Paraquat Dichloride Training

Applicators must complete an EPA-approved paraquat training listed on the following Website: <https://www.epa.gov/pesticide-worker-safety/paraquat-dichloride-training-certified-applicators>. The training must be completed a minimum of every three years.

Paraquat Dichloride Training for Certified Applicators

As required by EPA's 2016 [Paraquat Dichloride Human Health Mitigation Decision](#) [↗](#) and paraquat dichloride (a.k.a. paraquat) product labels, certified applicators must successfully complete an EPA-approved training program before mixing, loading, and/or applying paraquat. The training provides important information about paraquat's toxicity, label requirements and restrictions, and the consequences of misuse. The training was developed by paraquat manufacturers as part of EPA's 2016 risk mitigation requirements and has been approved by EPA.

The EPA-approved training module can be accessed here: [Syngenta Crop Protection Training for Certified Applicators](#) [↗](#).

Recent Regulatory Reviews

EPA –

August 2021 - Paraquat Dichloride Interim Registration Review Decision <https://www.regulations.gov/document/EPA-HQ-OPP-2011-0855-0307>

October 2025 -Volatilization potential of paraquat in field use situations (EPA-HQ-OPP-2011-0855-0554)
: <https://www.epa.gov/pesticides/epa-updates-review-potential-paraquat-volatilization-and-plans-request-additional-data>

California Department of Pesticide Regulation

December 2024 - *Preliminary Report of the Potential Human Health Outcomes Resulting from Paraquat Exposure.*

<https://www.cdpr.ca.gov/active-ingredient/paraquat-dichloride/>