



Paraquat use requirements: What you need to know

February 2022

What is Paraquat?

Paraquat is a highly toxic herbicide and desiccant. It is classified as a restricted use pesticide (RUP) because of its acute toxicity through all routes of exposure. Toxicity information indicates that one sip of paraquat can be lethal, and there is no known antidote. Paraquat is also corrosive to skin and is associated with a number of severe worker exposure incidents involving leakage or accidental spray in occupational settings.

Significant changes

Who can use paraquat?

Paraquat has long been a restricted use pesticide (RUP), requiring the purchaser to be a certified applicator. However, most paraquat labels currently in the marketplace also limit the application, and other non-application uses including mixing and loading, to “certified applicators only”. That is, certified applicators can no longer supervise the application or use of paraquat by non-certified individuals. For example, a farmer with a Private Applicator’s license can no longer supervise applications, mixing and loading, or other uses conducted by non-certified, unlicensed employees or family members.

Training Requirements

In addition to the certification requirements, paraquat labels for currently manufactured products have been updated to require a special training requirement for applicators. Prior to applying the product, applicators must first complete an EPA-approved paraquat training that is available online: <https://oda.fyi/ParaquatTrainingOnline>. The training is valid for 3 years from the date of completion. Please note that attending general continuing education trainings for pesticide credits is not a substitute for the EPA-approved paraquat training.

The term “use” has been further defined for paraquat products:

According to the EPA, “use” includes: “pre-application activities involving mixing and loading the pesticide; applying the pesticide; and other pesticide-related activities, including, but not limited to, transporting or storing opened pesticide containers, cleaning equipment, and disposing of excess pesticides, spray mix, equipment wash waters, pesticide containers, and other paraquat-containing materials”.

BOTTOM LINE: You must be a certified applicator before performing any “use” activities with paraquat¹, and before applying paraquat, you must complete the EPA-approved paraquat training.

¹Label changes approved by EPA in July 2021 do provide an exception for truck drivers that transport previously opened paraquat containers when certain conditions are met. More information is provided in this factsheet.

Certification

Am I a “certified” applicator?

If you are actively licensed in Oregon with one of the following licenses, then you are “certified”:

- Private Applicator;
- Commercial or Public Pesticide Applicator with any appropriate license category. Note: Those with only the School Integrated Pest Management license category are not certified;
- Pesticide Consultant with the Demonstration & Research (D&R) license category. Note: Pesticide Consultants without the D&R license category are not certified and are not licensed to purchase or apply restricted use pesticides (RUP); however, they can advise on the use of RUPs.

I am appropriately certified and licensed in Oregon. Can those that I supervise apply, mix/load, or otherwise use paraquat products?

If you are supervising non-certified applicators, the answer is no. Paraquat labels limit use to “certified applicators only”. Licensed Pesticide Apprentices, licensed Immediately Supervised Trainees, and unlicensed individuals are all prohibited from applying, mixing/loading, or otherwise using paraquat products.

Product registration and stocks

Which Oregon-registered products contain paraquat?

The Oregon Department of Agriculture (ODA) registers pesticides for sale and distribution. The table below lists paraquat-containing products that are currently registered in Oregon. Growers and applicators may have stocks of older paraquat products that are no longer sold or distributed in Oregon, and therefore, not currently registered or listed in the below table. Please check with ODA if you have questions.

REGISTRANT NAME	EPA REGISTRATION NUMBER	PRODUCT NAME
AMVAC Chemical Corp	5481-615	PARAZONE 3 SL HERBICIDE
Drexel Chemical Company	19713-617	DREXEL QUIK-QUAT
Helm Agro US Inc	74530-48	HELMQUAT 3SL
Innvictis Crop Care LLC	89167-24-89391	DEVOUR
Loveland Products Inc	34704-1117	PARAQ
Makhteshim Agan NA DBA ADAMA	66222-130	PARAZONE 3SL HERBICIDE
Makhteshim Agan North America Inc	66222-130	PARAZONE 3SL HERBICIDE
Redeagle International LLC	85678-58	PARAQUAT 43.2% SL
Sharda USA LLC	83529-27	PARA-SHOT 3.0
Sinon USA Inc	82557-1	BONEDRY
Source Dynamics LLC	82542-3	SOLERA PARAQUAT CONC
Syngenta Crop Protection LLC	100-1431	GRAMOXONE SL 2.0
Syngenta Crop Protection LLC	100-1652	GRAMOXONE SL 3.0
Tigris LLC	92647-12	TIGRIS PARAQUAT 3 SL
Willowood LLC	87290-35	WILLOWOOD PARAQUAT 3SL

What if I have older stocks of a paraquat product?

It is possible that some applicators still have older stocks of paraquat products, which may have labels that allow certified applicators to supervise non-certificated applicators, or do not require the EPA-approved paraquat training. You are responsible for following the label that is on the product in your possession. However, if you are making a tank-mix/application composed of both old labeled product and new labeled product, you must follow the most restrictive label. Please check all labels carefully.

Why do some paraquat products being sold still have older labels?

There are several factors at play. Paraquat labeling changes have been phased in by EPA over the past few years. Pesticide registrants have switched to the new labeling on different timetables within an EPA-approved 12-month grace period for each phase. Additionally, licensed dealers may have varying quantities of existing stocks of paraquat products with an older version of the labeling. EPA is allowing sale and distribution of these existing stocks by dealers until the supplies are exhausted.

Product transportation

I transport containers of paraquat that have previously been opened, such as bulk containers or tank cars. Do I need to be certified?

You must be certified if the label for the product you are transporting requires it. Carefully check the Restricted Use Pesticide box at the top of the label. The following example would require that truck drivers transporting previously opened containers be certified applicators.



However, label changes approved by EPA in July 2021² do provide an exception for individuals that transport previously opened paraquat containers when certain required label conditions are met. In the future, check the restricted use box for the following statement:

To be used by certified applicators only - NOT to be used by uncertified persons working under the supervision of a certified applicator, except that uncertified persons may transport containers as provided under Directions for Use.

In the future, the required conditions listed in the Directions for Use section of the label will include²:

- Requiring that container openings be sealed with a tamper-evident device by a certified applicator;
- Requiring pesticide containers to be secured against shifting during transport;
- Prohibiting truck drivers who are not certified applicators from transferring paraquat into or out of containers or having contact with or access to paraquat;
- Requiring full or emptied portable containers to be delivered to a certified applicator;
- Requiring certified applicators to ensure that truck drivers understand paraquat risks and all of the above conditions.

²Label changes regarding transport approved by EPA in July 2021 are not expected to be included on product labels in the marketplace until sometime in 2022.

Other labeling changes

Are there any additional changes to paraquat products that I should be aware of?

All non-bulk paraquat product containers (less than 120 gallons) currently in distribution must meet closed-system packaging requirements. Pesticide labeling will also include supplemental warning materials such as a warning sticker on the cap, a warning box on the back panel, and a counter card.

In addition to changes involving some of the transportation requirements, other label changes were approved by EPA in July 2021³. In part, these include:

- Requiring a 48-hour Restricted Entry Interval (REI) for all crop uses, except for cotton desiccation;
- Requiring enclosed cabs for applications to more than 80 acres in a 24-hour period;
- New drift reduction measures, including spray release height restrictions and aerial buffers around residential areas;
- Prohibiting the use of mechanically pressurized handguns and backpack sprayers.

For more information about these new label changes, please visit: <https://oda.fyi/ParaquatDichloride>.



Additional resources

- **ODA Pesticides Program:** 503.986.4635 or pesticide-expert@oda.oregon.gov.
- **Association of American Pesticide Control Officials (AAPCO):** Paraquat Fact Sheet <https://oda.fyi/ParaquatFAQ>.

³Label changes approved by EPA in July 2021 are not expected to be included on product labels in the marketplace until sometime in 2022.