

FLASH® HERBICIDE

Responsible Handling Information

WHAT HAS CHANGED?

In 2019 the New Zealand Environmental Protection Authority (EPA) undertook reassessment of paraquat containing substances, including FLASH HERBICIDE, due to potential risks to human health and the environment resulting from their use.

As a result of this reassessment a number of changes have been made to the controls relating to FLASH HERBICIDE. These are as follows:

- Restrictions on who can use FLASH HERBICIDE
- Restrictions on application rates
- Application buffer zones
- Restrictions on the type of nozzles that can be used when applying FLASH HERBICIDE
- Restrictions on wind conditions when applying FLASH HERBICIDE
- A requirement to provide responsible handling information

In addition, the EPA set limits on the level of certain harmful impurities in the active ingredient and a requirement to add emetics and stenching agents to the formulated product, which FLASH HERBICIDE already complied with.

Some changes take immediate effect, some come into effect on the 11th December 2020.

Please read the below information carefully as everyone using FLASH HERBICIDE must ensure they comply with these new requirements.

APPLICATION RESTRICTIONS

There are changes to who can use FLASH HERBICIDE.

From the 11th December 2020 the following use restrictions apply to FLASH HERBICIDE: No person can apply FLASH HERBICIDE except for agricultural or biosecurity purposes.

Agricultural purposes include use for agricultural and horticultural production purposes, including commercial forestry nurseries, commercial cropping systems and commercial ornamental horticulture production. It DOES NOT include forestry plantations, biosecurity purposes, amenity horticulture, and publicly accessible areas or horticulture, which would otherwise be considered domestic properties.

No person may use FLASH HERBICIDE for biosecurity purposes without first obtaining permission from the EPA under section 95A of the HSNO act 1996.

There are changes to the application rates for FLASH HERBICIDE.

From the 11th December 2020 the following maximum application rates apply to FLASH HERBICIDE: Maximum single application rate of 600 g paraquat ion per hectare; maximum annual application rate of 600 g paraquat ion per hectare.

600 g paraquat ion is equivalent to 2.4 L/ha of FLASH HERBICIDE. From this date you can apply no more than 2.4 L/ha of FLASH HERBICIDE to any application area in a year. You may apply a number of lower rate applications in a year, e.g. two applications of 1.2 L/ha, but the total applied must not exceed 2.4 L/ha in a year. The maximum amount you can apply in a single application is 2.4 L/ha.

There is a new requirement for buffer zones when applying FLASH HERBICIDE.

From 11th December 2020 the following downwind buffer zones apply when applying FLASH HERBICIDE:

Application method	Sensitive receptor	Downwind buffer zone	
		Application rate of less than 1.6 L/ha	Application rate of 1.6 – 2.4 L/ha
All ground based application methods (excluding use of non-motorised handheld equipment)	Aquatic organisms	Nil	5 m
	Non-target plants (non-threatened)	Nil	5 m
	Non-target plants (threatened)	5 m	5 m
All aerial applications	Aquatic organisms	5 m	15 m
	Non-target plants (non-threatened)	40 m	40 m
	Non-target plants (threatened)	60 m	100 m

These buffer zones have been established to protect sensitive receptors: aquatic organisms and both threatened and non-threatened plants. The person in charge of applying FLASH HERBICIDE and any person applying FLASH HERBICIDE must ensure that the substance is not applied within the respective distance of a downwind sensitive receptor.

There are new requirements for spray quality when applying FLASH HERBICIDE.

From 11th December 2020 the following restriction applies to the method of application of FLASH HERBICIDE: A person applying FLASH HERBICIDE must ensure that the spray is delivered as a **coarse quality spray** for ground based applications and **coarse to very coarse droplets** for aerial application.

Spray droplet quality is as classified by the American Society of Agricultural & Biological Engineers (ASABE) droplet size classification scheme (American National Standard ANSI/ASABE S572.1, March 2009).

Your sprayer nozzle supplier will be able to help you select the correct nozzles according to this standard for your sprayer setup.

SPILLAGES

Stores and warehouses holding FLASH HERBICIDE should have an appropriate spill kit on hand in case of a spill event. If you encounter a leaking container or spill of FLASH HERBICIDE do the following:

- Immediately exclude all bystanders and unnecessary personnel from the vicinity of the spill.
- Prevent smoking or the use of naked flames in the immediate vicinity.
- Wear appropriate protective clothing (non-absorbent footwear, e.g. gumboots), chemical resistant elbow length gloves (e.g. PVC or nitrile), chemical resistant apron and eye protection (face shield) to clean up spills.
- Prevent material from entering waterways (activate emergency shutoff systems or insert drain covers) or contaminating other cargo or vegetation using the most readily available barrier material e.g. sand, earth.
- If spillage is large, contain it by building a barrier of earth or sandbags.
- Empty any product remaining in damaged or leaking containers into a clean empty container and label immediately.
- Absorb spills with an inert material (such as vermiculite, earth, sand or synthetic absorbent substance) and place in waste containers.
- Wash area with water and alkaline detergent and absorb any remaining liquid with further inert material.
- Place all used absorbent material into secure waste containers for disposal.
- Puncture any damaged containers to prevent reuse.
- Dispose of the waste safely at an approved facility (contact your district council for advice).

Further information regarding emergency response, such as in the event of a fire, can be found in the safety data sheet (SDS).

If you are exposed to paraquat whilst managing a spill refer to the exposure section.

EXPOSURE

There is no specific antidote to paraquat poisoning, and early treatment is essential. IF POISONING IS SUSPECTED, RUSH VICTIM TO THE NEAREST HOSPITAL AFTER ALERTING THEM BY TELEPHONE.

- IF SWALLOWED** Rinse mouth. Do NOT induce vomiting. Take to the nearest hospital immediately after alerting them by telephone. For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately.
- IF ON SKIN** Remove contaminated clothing by cutting rather than pulling over the head. DO NOT SCRUB SKIN. Wash the affected area with water and soap. Wash contaminated clothes before re-use. If skin irritation occurs, get medical advice/attention.
- IF IN EYES** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, call a POISON CENTER or doctor/physician.
- IF INHALED** Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing has stopped, DO NOT USE DIRECT MOUTH TO MOUTH METHOD. Use alternative respiratory or proper respiratory device. Take to the nearest hospital immediately after alerting them by telephone. For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately.

CONTACT INFORMATION

FLASH HERBICIDE is imported and distributed by ADAMA New Zealand Limited. We can be contacted on 03 543 8275 or nzinfo@adama.com.

RESPONSIBLE HANDLING INFORMATION

FLASH HERBICIDE has been classified by the EPA as having the following human health hazards:

- Fatal if inhaled
- Toxic if swallowed
- May be harmful if in contact with skin
- Causes skin irritation
- Causes serious eye irritation
- Causes damage to organs

Inhalation and ingestion pose the greatest risks.

FLASH HERBICIDE is non-volatile, meaning it does not generate fumes. Consequently, there is negligible risk of inhalation when handling the undiluted product. The stenching agent is added to distinguish the aroma of FLASH HERBICIDE from that of beverages to prevent unintentional ingestion. The stenching agent is present at concentrations that do not cause adverse effects from inhalation. However, inhalation should be avoided.

The greatest risk of inhalation comes from spray mist after FLASH HERBICIDE is diluted to field rates. The new restrictions on spray quality/droplet size mean spray droplets should be too large to be carried in the air, so should pose little risk of inhalation. However, respiratory protection (air-purifying respirator with organic vapor cartridge(s) in combination with a particulate filter) should be worn when applying FLASH HERBICIDE, unless by closed-cab application methods, where the cab is fitted with filtration to protect against dust, aerosols and vapour.

The main risk of ingestion occurs during preparation of spray mixtures, particularly the risk of splash-back when pouring into measuring containers or spray tanks. The risk of ingestion can be reduced by wearing a face shield when handling undiluted product. There is also a risk from equipment failure, such as leaks or a burst hose on a sprayer. Ensure equipment is well maintained. Do not attempt to deal with equipment failures while the equipment contains FLASH HERBICIDE spray mixture without proper protective equipment.

There is also a lower level risk of poisoning from dermal (skin) absorption, particularly when handling undiluted product, and especially for people with open wounds or dermatitis. Do not handle FLASH HERBICIDE or spray mixtures containing FLASH HERBICIDE without appropriate chemical resistant gloves and clothing.

In addition to human health risks, FLASH HERBICIDE has also been classified as hazardous to terrestrial vertebrates (e.g. birds), terrestrial invertebrates (e.g. bees), and aquatic life (e.g. aquatic algae, crustaceans and fish).

Because of these hazards FLASH HERBICIDE **must be stored, handled, used and disposed of with care.**

Always observe the following:

- **Storage**

FLASH HERBICIDE must be appropriately secured from access by all people other than a certified handler, i.e. it has to be locked up or under the control of a certified handler at all times. Store FLASH HERBICIDE in the original container and NEVER put FLASH HERBICIDE into any container that is not designed for pesticide use, such as food or drink containers, or unlabelled containers. We recommend you keep FLASH HERBICIDE in the original container until it is used up. Always keep the container tightly closed, and store in a cool, well-ventilated area away from stock feed or foodstuffs.

- **Handling**

Read the label and make sure you understand all the information and instructions before handling FLASH HERBICIDE. If in doubt, give us a call.

Any person mixing or loading FLASH HERBICIDE must be suitably qualified* to do so, or must receive guidance and, if required, assistance from a suitably qualified* person.

Do not eat, drink or smoke whilst handling. When handling FLASH HERBICIDE, such as preparing spray mixtures, **always** wear appropriate protective clothing (non-absorbent footwear, e.g.

gumboots), chemical resistant elbow length gloves (e.g. PVC or nitrile), chemical resistant apron, and eye protection (face shield).

Use appropriate measuring equipment, ensuring it is of an adequate size to prevent overflow. Triple rinse measuring equipment into the spray tank after use. ADAMA uses double-bung or easy pour (“anti-glug”) drums to minimise splashes when pouring. To learn how to correctly handle easy pour drums watch the video on our website: <http://www.adama.com/new-zealand/en/crop-protection/herbicides/flash.html>

- **Use**

Read the label and make sure you understand all the information and instructions before applying FLASH HERBICIDE. If in doubt, give us a call.

FLASH HERBICIDE is very toxic to aquatic organisms and non-target plants, and any person applying FLASH HERBICIDE must be suitably qualified* to do so, or must receive guidance and, if required, assistance from a suitably qualified* person.

Always use well maintained and calibrated spray equipment. Keep unauthorised people, children and animals away from spraying sites and operations. Use in accordance with the New Zealand Standard NZS8409 Management of Agrichemicals (or the prevailing version of this standard).

You must keep written records of each application of FLASH HERBICIDE.

Before spraying:

- Check you have selected the right nozzles to achieve the required spray quality before you start preparing the spray mixture.
- Assess weather conditions and check the wind speed is appropriate. DO NOT apply FLASH HERBICIDE when wind speeds are less than 3 km/hr or more than 20 km/hr as measured at the application site.
- Make sure you know the location of sensitive receptors and that you understand and observe the appropriate buffer zones.

During spraying:

- Use full PPE and respiratory protection (unless applying with closed-cab application methods)
- Do not apply FLASH HERBICIDE onto or into or water.
- Do not apply when bees are foraging or likely to visit treated plants before spray has dried.
- Avoid applying when birds (and eggs) are present in the application area.

After spraying:

- Clean spraying equipment according NZS8409 Management of Agrichemicals (or the prevailing version of this standard).
- Thoroughly wash (shower or bath) after work.
- Wash work clothes and PPE thoroughly and separately from household laundry.

- **Disposal**

Product disposal: Unwanted FLASH HERBICIDE or spray mixtures containing FLASH HERBICIDE should be disposed of by the following methods:

- Applying the product or spray mixture according to the label directions (i.e. to an approved crop at an approved rate) or
- Through the Agrecovery[®] Chemical Recovery service or other licensed hazardous waste facility. Contact us if you need further information about suitable licensed hazardous waste facilities.

Container Disposal: Triple rinse empty container into the spray tank. Submit clean empty container to an Agrecovery depot for recycling. Alternatively, puncture and bury in a suitable landfill.

OTHER

FLASH HERBICIDE must be under the control of a certified handler. It can be handled by people other than the certified handler provided that the certified handler:

- is present at the location
- has provided guidance to the person handling the substance
- is available, at all times, to provide assistance while the substance is being handled.
- appropriately secured from access by people other than a certified handler.

FLASH HERBICIDE is a tracked substance. The PCBU with management or control must ensure that a record is kept of the location and movement of the tracked substance at each phase of its life cycle.

The PCBU with management or control of FLASH HERBICIDE must ensure written records must be kept of each application. The application record must include the following information:

- a) the product or chemical name of the substance
- b) the date and time of each application of the substance
- c) the amount of the substance applied
- d) the location where the substance was applied
- e) if the substance is applied to air, a description of the wind speed and direction when the substance was applied
- f) the name of the worker using the substance and the physical address of the worker's workplace
- g) in relation to aircraft carrying out aerial application of a substance, electronic data files that indicate locations of where the substance has been dispensed and aircraft secondary positional information (for example, geographic information system original shape files, based on Global Navigation Satellite System data)

FAQS

How can I avoid ingestion?

Do not store FLASH HERBICIDE in food or drink containers, or unlabelled containers. Wear a face shield when handling and mixing.

How do I protect water bodies?

Identify water bodies before you start spraying and ensure that you understand and observe the stated buffer zones. Do not apply FLASH HERBICIDE onto or into water, and prevent contamination of any water supply with product or empty containers.

How do I protect birds?

The risk to birds has not been reliably quantified. However, avoid spraying when birdlife, including bird's eggs, are present in the application area. Farmed birds should be kept away from the application area until sprayed weeds or crop have desiccated.

How do I protect bees?

Do not apply FLASH HERBICIDE to any plant or tree likely to be visited by bees (a) at the time of application or (b) immediately after application until spray has dried or (c) in areas where bees are foraging.

What should I do if I am unsure about the new requirements?

Get in contact with us at 03 543 8275 or nzinfo@adama.com, we are here to help.

Useful contact numbers:

ADAMA NZ Ltd: 03 543 8275

Emergency response number: 0800 734 607

National Poisons Centre: 0800 POISON (0800 764766)

Full details of the EPA paraquat assessment can be found here: <https://www.epa.govt.nz/public-consultations/decided/reassessment-of-paraquat/>

*Refer to Schedule 10 of the Hazardous Substances (Hazardous Property Controls) notice 2017 for a list of suitable qualifications. <https://www.epa.govt.nz/assets/Uploads/Documents/Hazardous-Substances/EPA-Notices/7b7a7cbe9b/Hazardous-Substances-Hazardous-Property-Controls-Notice-2017.pdf>

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Approved pursuant to the HSNO Act 1996, Approval No. HSR000828 See www.epa.govt.nz for approval controls

ADAMA New Zealand has taken every care in preparing this responsible handling information. However, it is the responsibility of the user to ensure they are compliant with local and national regulations.