



GLYPHOSATE



Glyphosate has a 40-year history of use for effective weed management. Regulatory and scientific authorities worldwide, including New Zealand and Australia, have concluded that glyphosate, when used according to label directions, does not pose an unreasonable risk to human health, the environment, or pets. These regulatory authorities periodically review the safety of glyphosate.

Glyphosate was introduced in 1974 because of its effective way of controlling many unwanted weeds. In New Zealand, approximately 25 companies have registered glyphosate-based herbicide products.

HOW IS IT USED?



Farmers

- Farmers have multiple options to control weeds—tillage, pulling by hand, herbicides, crop rotation, to name a few. Glyphosate is one of the herbicides farmers use, though it's not the only one. Glyphosate is typically used in combination with many other agricultural practices to manage weeds. When farmers use glyphosate and other pesticides, they do it with precision – applying them in the right place at the right time, in just the right amounts. After a farmer mixes a custom pesticide application, the spray is mainly water.
- Herbicide manufacturers provide maximum use rates to help farmers to use the herbicides in a precise and judicious manner. The rates have been tested by the companies, academics and regulatory authorities.
- Glyphosate has helped enable farmers around the world to adopt no-till farming, which has significant environmental benefits. With no-till farming, farmers don't have to turn over their soil as much to control weeds, helping to reduce emissions and soil erosion.



Public land management

- Weeds can pose problems for building owners, schools, recreational areas and natural habitats.
- Glyphosate can help to control roadside vegetation to maintain driver visibility and removes weeds from schools, parks and recreational areas, and helps to manage habitats that are threatened by uncontrolled growth of unwanted plant species that endanger native plants and animals.
- Like farmers and home owners, industrial users of glyphosate use precision application – the right amount at the right time along with other weed treatments.



Home gardeners

- Like farmers, homeowners also encounter weeds, only on a smaller scale.
- Homeowners use lawn and garden herbicides to kill weeds in, footpaths, driveways or gardens.
- Homeowners can choose from a wide variety of herbicides as well. Like with the approved uses on a label for glyphosate for farmers, glyphosate products for use in lawn and garden also have a recommended use rate to help consumers use the product precisely.

WHAT MAKES IT SAFE?



800+

Studies have been conducted that confirm the safety of glyphosate



42

Years of safe use



160+

Countries have approved the safe use of glyphosate



Regulatory agencies around the world have reviewed glyphosate over the decades and repeatedly and consistently concluded that all labeled uses of glyphosate are safe for human health.



Glyphosate safety is supported by one of the most extensive worldwide human health, crop residue and environmental databases ever compiled on a pesticide product.

GLYPHOSATE IS SAFE FOR HUMANS, WILDLIFE AND THE ENVIRONMENT



Humans

Glyphosate specifically inhibits an enzyme that is essential to plant growth. This enzyme (EPSP) is not found in humans or animals, contributing to the low risk to human and animal health when using glyphosate-based products according to label directions. The presence of this enzyme in plants, but not in humans and animals, provides a basis for a specific selective toxicity to plant species.



Wildlife

Glyphosate has undergone extensive ecotoxicology testing over the last 40 years with a wide range of fauna and flora to acquire global regulatory approvals. Glyphosate also has very low toxicity to aquatic wildlife.



Environment

Glyphosate is low-volatility, binds tightly to soil, is biodegraded over time into naturally occurring products including carbon dioxide and phosphate. Glyphosate does not bioaccumulate and there is no indication from environmental studies that glyphosate harms soil microbial communities.

SCIENTIFIC AND REGULATORY CONSENSUS ON GLYPHOSATE

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World Health Organisation programs have reviewed and confirmed the safety of glyphosate: Two of the WHO programs – the Core Assessment Group and the International Programme on Chemical Safety – both concluded glyphosate is not carcinogenic. The WHO Guidelines for Drinking-Water Quality program concluded glyphosate does not represent a hazard to human health.

“There is no change to the science behind our current position, which is products containing glyphosate remain safe to use when you follow the instructions on the product label.”

New Zealand Environmental Protection Authority (2018)

“EPA has concluded that glyphosate does not pose a cancer risk to humans.”

U.S. Environmental Protection Agency (2017)

“The APVMA currently has no data before it suggesting that glyphosate products registered in Australia and used according to label instructions present any unacceptable risks to human health, the environment and trade. The weight and strength of evidence shows that glyphosate is not genotoxic, carcinogenic or neurotoxic.”

Australian Pesticides and Veterinary Medicines Authority (2018).

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Healthy crops : Healthy animals : Healthy business