# Glyphosate



### Wondering what glyphosate is and why it's being talked about?

# It's important to know the facts,

so here are some important ones.

#### What is glyphosate?

Glyphosate is one of the most widely used herbicides in the world. It revolutionised farming when it came on the market in the mid 1970's because of how effective and safe it is.

Glyphosate is a broad-spectrum herbicide which works by inhibiting an enzyme plants need to be able to grow. It's used by farmers, home gardeners and those protecting our national parks, schools and public recreation areas from weeds and invasive species.

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# Should I be concerned about the toxicity of glyphosate?

Glyphosate actually has a lesser acute toxicity than table salt. More than 800 scientific studies and independent safety assessments support the fact that glyphosate-based products are safe and they do not cause cancer.

#### How can I be sure glyphosate is safe?

Australia's agricultural chemical industry is regulated to the same extent as human pharmaceuticals.

Before any agricultural chemical product can be sold or manufactured in Australia, it goes through rigorous scientific assessment by the Australian Pesticides and Veterinary Medicines Authority (APVMA). They assess the safety and expected use of the product.

In 2016 the APVMA examined glyphosate and found there were no grounds for its approved uses to be reconsidered.

Every independent, science-based regulatory agency globally (including; Germany, New Zealand, Canada, the US, Japan and the European Union) has comprehensively evaluated glyphosate and found it safe to use.

#### How can I use glyphosate safely?

All chemical products, including home cleaning products used daily, have instructions for safe and correct use on the label. To ensure the safe use of chemical products, including glyphosate-based herbicides, always read the label and use as directed

"After a thorough review ... EPA has concluded that there are no risks of concern to human health when glyphosate is used according to the label and that it is not a carcinogen."

"Glyphosate does not pose a cancer risk to humans when used in accordance with the label instructions."

Australian Pesticides and Veterinary Medicines Authority (APVMA)

## Why have I heard glyphosate linked with cancer?

In 2015 the International Agency for Research on Cancer (IARC) added glyphosate to its list of 'probable carcinogens'. While this sounds alarming, it's important to know that IARC flags hazards only. They are not a regulatory agency and does not undertake any research of its own.

It plays a role by advising regulatory bodies of potential hazards which allows the relevant regulatory agencies to assess if there are any associated risks and manage them appropriately.

Substances such as aloe vera, pickled vegetables and coconut oil are all on the IARC lists of possible or probable carcinogens. Sunlight, alcohol and bacon are all on the IARC list of definite carcinogens.

The world's leading independent scientific regulators comprehensively reviewed the IARC report and reaffirmed that products containing glyphosate pose no risk of cancer.

## Is glyphosate bad for the environment?

Glyphosate, like all crop protection and weed management products, plays a critical role in environmentally sustainable land management practices.

The application of glyphosate eradicates pests without having to disturb the soil and disrupt the weed's roots via tillage. It is scientifically proven that conservation tillage, enabled by glyphosate, can reduce soil erosion by up to 90 per cent, significantly improve water retention and increase or maintain carbon storage.

# Haven't recent court cases proven a link between glyphosate and cancer?

No, the recent civil litigation cases have been decided by juries, not on the basis of scientific assessment.

A study that has been running since 1993, the US Agricultural Health Study, looks specifically at the risk between glyphosate exposure and non-Hodgkin lymphoma.

In that time investigators from the National Cancer Institute, the National Institute of Environmental Health Sciences, the Environmental Protection Agency and the National Institute for Occupational Safety and Health have comprehensively analysed data from over 89,000 farmers and their spouses. They have found no association between glyphosate and non-Hodgkin lymphoma — regardless of the exposure level.

"Residues in food are so low for all chemicals and glyphosate too, that there is no cancer risk."

Professor Bernard Stewart, Scientific Advisor, Cancer Council Australia

#### What if we didn't have glyphosate?

Glyphosate is an essential tool for Australian farmers, environmental land managers and local councils to be productive in an environment that is under constant threat of weeds. Without crop protection products like herbicides, up to 80 per cent of the globe's crops could be lost to weeds, pests and diseases.

That means over two thirds of the food on your plate and the beer or wine in your glass exists because farmers have access to safe, modern crop protection products. Continued sensible use of agricultural chemicals ensures Australian farmers, environmental land managers and councils can effectively control pests, weeds and diseases.

In turn, the community enjoys safe, abundant, disease-free and affordable food, pristine natural environments and parks and roadsides free from invasive weeds.

