Eight Commonly Asked Questions About Glyphosate

How long has glyphosate been around?
For more than 40 years, farmers – as well as governments, gardeners, parks, golf courses, schools, and other users – have depended on glyphosate as an efficient and cost-effective tool that can be used safely to control problematic weeds.

How does glyphosate work?
Glyphosate specifically inhibits an enzyme that is essential to plant growth. This enzyme is not found in humans or animals. After it does its job, glyphosate breaks down in the soil into naturally occurring substances.

How do farmers use glyphosate?
Farmers time their applications carefully according to the growing stage of the plant and are diligent about using the proper amount to maximize the effectiveness of the product.

What is special about glyphosate?
Glyphosate has been a breakthrough for farming. Not only do glyphosate products work well on weeds, but they also help farmers grow crops more sustainably. For example, glyphosate has helped farmers adopt what is called "conservation tillage." With conservation tillage, farmers can disturb less soil and drive their tractors less. Thus, farmers can reduce soil erosion and carbon emissions, which is great for the environment.

Is glyphosate safe?
In evaluations spanning four decades, the overwhelming conclusion of experts worldwide has been that glyphosate can be used safely. In fact, glyphosate safety is supported by one of the most extensive worldwide human health, crop residue and environmental databases ever compiled on a pesticide product. Like all pesticides, regulatory authorities around the world routinely review the latest safety data on glyphosate.

Does glyphosate cause cancer?
No. No regulatory agency in the world considers glyphosate a carcinogen.

Why did IARC declare glyphosate a carcinogen?
IARC's classification is inconsistent with the overwhelming consensus of regulatory authorities and other experts around the world, who have assessed all the studies examined by IARC – and many more. While IARC's erroneous classification has attracted media attention and been used repeatedly by certain anti-agriculture organizations to generate unwarranted fear and confusion, regulators around the world continue to support the safe use of glyphosate. In fact, since IARC classified glyphosate, regulatory authorities in the United States, Europe, Canada, Japan, New Zealand and Australia have publicly reaffirmed that glyphosate does not cause cancer.

How do regulatory authorities assess pesticide safety?

Before companies can make pesticides available to farmers, these crop protection tools must undergo comprehensive evaluations by regulatory authorities. In the U.S., the Environmental Protection Agency (EPA) requires all new pesticides to undergo more than 100 environmental and human health safety studies before they are approved. The EPA only approves products that can be used safely according to label instructions. Product labels detail how farmers and others can legally use the product. Any use contrary to label instructions is against the law.

In addition, the EPA routinely re-reviews pesticides in subsequent years to consider new information from more recent studies that may have occurred since the initial registration. Glyphosate is currently undergoing registration review, a program that re-evaluates all pesticides on a 15-year cycle.

Additional Resources

- IARC's Report on Glyphosate, Bayer (Formerly Monsanto)
- Benefits and Safety of Glyphosate, Bayer (Formerly Monsanto)
- Glyphosate General Fact Sheet, National Pesticide Information Center

For more details about the comprehensive processes in place to ensure glyphosate and other pesticides can be used safely visit www.EPA.gov/pesticides. The EPA only approves pesticides that can be used safely according to label instructions.