

# HOW SAFE ARE ANTIMICROBIALS?

Antimicrobial pesticides, including disinfectants, sanitizers, and preservatives, are critical chemistries that help kill and control the spread of microorganisms such as bacteria, viruses, mold, and algae. The following explains how antimicrobials are regulated for your safety.

## REGULATORY OVERSIGHT

The U.S. Environmental Protection Agency's (EPA) Antimicrobials Division in the Office of Pesticide Programs is wholly devoted to evaluating antimicrobials used on environmental surfaces. Whether a disinfectant wipe or a water treatment biocide, EPA approval is required before any antimicrobial can be marketed, sold, or distributed.

The primary federal law governing antimicrobial pesticides is the Federal Insecticide, Fungicide, and Rodenticide Act, or FIFRA. FIFRA applies to pesticides used for agricultural and non-agricultural purposes, including antimicrobial pesticides. Under FIFRA, the EPA will only approve antimicrobials if they have no "unreasonable adverse effects" on people or the environment. For antimicrobials that may leave a residue on food, even stricter standards apply. These products can only be approved if they pose "reasonable certainty of no harm," even considering the most sensitive sub-populations such as children.

Before an antimicrobial product is marketed or sold, and periodically after initial approval, EPA conducts a risk evaluation. The evaluation is based on an extensive database of scientific studies on the active ingredients and specific formulation of the product. If the EPA is convinced an antimicrobial meets the FIFRA standard, it grants a "registration," which is the right to sell the product. EPA also approves the product's label, which contains directions for how to use the product and caution statements. Child-resistant packaging is also required for certain antimicrobials that could pose a risk to children.

After a product is marketed, manufacturers of antimicrobials must notify the EPA of any discovered adverse effects. The EPA considers this information in its periodic reevaluations of registered products and may take action if warranted.

## LEGISLATIVE MANDATES

Antimicrobial pesticides are governed by legislation beyond FIFRA:

In addition to EPA registration under FIFRA, each state reviews and registers pesticides under state law before they can be sold in that state.

The Federal Food, Drug, and Cosmetic Act (FFDCA) authorizes the EPA to set tolerances, or maximum residue limits, for pesticide residues on foods.

## ENFORCEMENT

The law means nothing without compliance. Sales of unregistered or misbranded pesticides are unlawful. The EPA Office of Enforcement and Compliance Assurance continues to follow and manage products when they are on the market. State regulators also play an important role in enforcement actions. Effective enforcement further contributes to protecting you, your family and the environment.

