Household Pesticides

Sustainability Insights





Product Description

Household Pesticides include chemical formulations used to control pests in or around the home, which are packaged as sprays, granules, powders, liquids, and baits. Product types include insecticides, herbicides, rodenticides, fungicides, antimicrobials, and insect repellents.

Mission

The mission of The Sustainability Consortium (TSC) is to improve the sustainability of products when they are made, purchased, and used, with a focus on manufacturers and the retail buyers who decide what products to carry in stores. The information in this document is drawn from our detailed research on known and potential social and environmental impacts across product life cycles. TSC acknowledges that other issues exist, but we have included here those that are most relevant to the decision making of retail buying teams and manufacturers. The topics are listed alphabetically for ease of reading; the order does not represent prioritization or other criteria.



Sustainability Insights

Animals

Animal Welfare

Depending on local, legal, and regulatory requirements, animal testing may be required to substantiate the safety of ingredients and final formulations of household pesticide products. Ingredient and formula manufacturers should support the development and validation of alternative testing methods and adopt alternatives, where sanctioned, to reduce or eliminate the need for animal testing of household pesticide products.

Consumers

Consumer Health and Safety

Manufacturers should formulate products to contain ingredients in accordance with applicable standards, perform any necessary assessments on ingredients and formulations, and monitor for unintended risks. Manufacturers should list ingredients, design packaging to guard against accidental exposures, and communicate safe usage and disposal instructions to consumers in a clear and accessible fashion.

Use of Resources

Biodiversity

Manufacturers should design their products to minimize damage to natural systems and to species that are not specifically targeted by the product used. This can be accomplished by adopting technologies and ingredients that minimize environmental harm and by monitoring the environmental fate of product ingredients under scenarios representative of product use.

Climate and Energy

Active ingredient production consumes significant amounts of energy, leading to greenhouse gas emissions. Active ingredient manufacturers should abate these impacts by measuring, tracking, and reporting energy use and greenhouse gas emissions, with a focus on reduction. They should also perform preventative maintenance on equipment, replace inefficient equipment, use renewable energy sources, and encourage efficient energy behaviors throughout their operations.

Packaging

Packaging design should be optimized to ensure that packaging performs its essential functions of containment and protection while minimizing use of materials, energy resources, and environmental impacts across the life cycle of the packaged product. Under-packaging and over-packaging can both lead to increased impacts. These impacts may be mitigated by using more energy-efficient manufacturing and selecting recyclable and sustainably managed renewable materials, while considering material use and disposal restrictions.

Pollution

Air and water pollutants may be emitted during the production of chemicals used in pesticide formulations. Manufacturers should work with their supply chains to implement best practices and technology to minimize or eliminate these pollutants, such as establishing a leak detection and repair program, using vapor recovery units at unloading stations, recycling gases, and selecting appropriate connectors and fittings.

Workers and Communities

Workers

Workers may be exposed to chemicals or other industrial hazards during production. To help ensure worker health and safety, final product and ingredient manufacturers should have a documented health and safety management plan, including a chemical management plan where needed, install proper ventilation, and provide safety training and personal protective equipment to workers. Manufacturers should procure materials from suppliers that address worker health and safety through technology, policies, and practices and perform audits when needed.





TSC is jointly administered by Arizona State University and the University of Arkansas © 2017 Arizona State University and University of Arkansas For more information about our suite of products please visit: www.sustainability.consortium.org/what-we-of