



Diazinon Revised Risk Assessment and Agreement with Registrants

Action and Rationale

EPA is releasing its revised risk assessment and announcing an agreement with registrants to remove and phase out certain uses of the organophosphate pesticide diazinon. Also known as Spectracide and other trade names, diazinon is one of the most widely-used insecticides in the U.S., especially for household lawn and garden pest control.

The Food Quality Protection Act, enacted in 1996, sets a more stringent safety standard for most pesticides and offers special protection for children. EPA has accepted a voluntary agreement from the manufacturers of diazinon to modify the uses of this pesticide to address the tough new safety standard of FQPA.

The Agency accepted the termination of all indoor residential and indoor non-residential uses of diazinon. EPA and the registrants also have agreed to phase out and cancel outdoor residential lawn and garden uses (i.e., all outdoor non-agricultural uses) over the next few years. Together, these actions will end about 75% of the current use of diazinon. EPA and the registrants have further agreed to remove about one third of the agricultural crop uses of diazinon. This action will also help mitigate risks to workers, birds and other wildlife, drinking water resources, and the environment.

Risk Mitigation

EPA and the registrants of diazinon have agreed to the following modifications:

Ž Reducing Residential Risks... About 75% of diazinon currently is used in and around the home. Diazinon accounts for about 30% of the homeowner use insecticide market. The agreement will result in termination of all retail sale of diazinon for residential crack and crevice treatments and all other indoor uses by the end of 2002.

The agreement also virtually ends sales of the residential lawn care use of diazinon in 2003, and provides for orderly transition to a new product line. The home lawn care use accounts for most residential exposure but less risk than the indoor use of diazinon. Under the agreement, production of diazinon for home lawn care and all other outdoor non-agricultural uses must phase down at least 50% by 2003. Production, formulation, and sales to retailers are scheduled to phase out and end completely during 2003. Registrants will buy back any products from retailers that remain at the end of 2004. However, few retail products for home lawn care uses are expected to remain in the market by that time.

Ž Reducing Ecological Risks... Broadcast application of diazinon to turf poses one of the greatest pesticide risks to birds. Just one granule or seed treated with diazinon is enough to kill a small bird. Diazinon had the highest number of reported bird kill incidents of any registered pesticide during 1994-1998. Birds of many species have been killed, including ducks, geese, hawks, songbirds, woodpeckers, and others. Since residential use of diazinon accounted for over half of these incidents, phasing out and canceling the outdoor residential

uses is expected to further mitigate risks to birds and other wildlife.

Diazinon is one of the most commonly found pesticides in air, rain, and fog. Monitoring data indicate that while it is widespread in surface water nationally, diazinon is most commonly found in surface water in urban areas as a result of runoff from residential use. Phasing out and eventually canceling the outdoor residential uses of diazinon, as well as some current agricultural uses, will help reduce residues of diazinon in surface water and throughout the environment.

Ž Reducing Drinking Water Risks... The agreement to phase out and cancel all outdoor residential uses of diazinon is expected to reduce human exposure to diazinon through drinking water, since residential applications are potentially a major source of drinking water contamination.

Ž Reducing Worker Risks... Risks to agricultural workers who mix, load, and apply diazinon or harvest treated crops also are of concern to EPA. The agreement will help mitigate worker risks by canceling about 30% of the current agricultural uses of diazinon. The agreement also will maintain the Restricted Use Pesticide classification for remaining diazinon crop uses so they will continue to be limited to trained, certified applicators. These and other measures to reduce both worker and ecological risks will be discussed further in consultation with stakeholders as EPA develops an interim reregistration eligibility decision for diazinon.

Ž Supporting Low-Risk Uses... The agreement allows about 70% of current diazinon agricultural uses to continue. The continuing diazinon uses are important to the production of many minor crops, and do not exceed the “risk cup” for diazinon. EPA will further consider worker and ecological risks in developing risk management options, considering public comments received during the next 60 days, and in completing an interim reregistration eligibility decision for diazinon.

Phased In Approach

The diazinon agreement phases in various restrictions and cancellations to address higher risk, indoor residential uses first. Because much pesticide risk reduction involves increasing margins of safety, it is reasonable to focus first on uses that achieve the greatest risk reduction for children. Allowing other uses to continue for specific periods of time will help ensure that appropriate alternatives are available for a reasonable and orderly transition.

Reregistration of Diazinon

The risk mitigation measures in this agreement represent an important step in EPA’s review of diazinon. As the Agency continues its review of diazinon through the reregistration process, we will continue to look at both occupational and ecological risks to ensure that diazinon meets current safety standards. If EPA determines that unreasonable risks remain for workers or the environment, the Agency will incorporate additional risk mitigation measures as part of the interim reregistration eligibility decision.

Provisions of the Agreement and Associated EPA Actions

Home Uses		
Site	Mitigation Measures	Effective Dates
<p>Indoor Uses All uses inside any structure, vehicle, vessel, aircraft, or enclosed area and/or on any contents therein (except mushroom houses), including residences, food/feed handling establishments, schools, museums, stores, hospitals, sports facilities, warehouses, and greenhouses. All indoor pet uses including pet collars.</p>	<p>Product registrations are being canceled or amended to delete indoor uses from end use product labels (except use in mushroom houses). EPA's Federal Register notice of January 10, 2001, proposed to delete these uses.</p>	<p>Cancellations become effective after the 30-day public comment period, upon issuance of a cancellation order in February 2001.</p> <p>As of March 1, 2001, manufacturing use products may no longer be used to formulate end use products for indoor uses.</p> <p>Retailers stop sale December 31, 2002</p>
<p>Outdoor Non-Agricultural Uses Home lawn, garden, and any other outdoor residential or outdoor non-agricultural uses</p>	<p>Production will phase down</p> <p>Uses will be phased out</p> <p>Technical registrants will buy back existing products from retailers</p> <p>Product registrations will (expire) be canceled, with no provision for existing stocks</p>	<p>Technical registrants reduce amount of diazinon produced by 50% or more by 2003.</p> <p>Stop formulation of products June 30, 2003 Stop sale to retailers August 31, 2003</p> <p>Commencing December 31, 2004</p> <p>December 31, 2004</p>

Agricultural Uses Proposed for Cancellation																																		
Crop	Action	Effective Dates																																
<table border="1"> <tr> <td>Alfalfa</td> <td>Parsnips</td> </tr> <tr> <td>Bananas</td> <td>Pastures</td> </tr> <tr> <td>Beans (dried)</td> <td>Peppers</td> </tr> <tr> <td>Bermudagrass</td> <td>Irish Potatoes</td> </tr> <tr> <td>Celery</td> <td>Sweet Potatoes</td> </tr> <tr> <td>Red Chicory (radicchio)</td> <td>Rangeland</td> </tr> <tr> <td>Citrus</td> <td>Sheep</td> </tr> <tr> <td>Clover</td> <td>Sorghum</td> </tr> <tr> <td>Coffee</td> <td>Spinach</td> </tr> <tr> <td>Cotton</td> <td>Squash (summer and winter)</td> </tr> <tr> <td>Cowpeas</td> <td>Strawberries</td> </tr> <tr> <td>Cucumbers</td> <td>Swiss chard</td> </tr> <tr> <td>Dandelions</td> <td>Tobacco</td> </tr> <tr> <td>Kiwi</td> <td>Tomatoes</td> </tr> <tr> <td>Lespedeza</td> <td>Turnips</td> </tr> <tr> <td>Parsley</td> <td></td> </tr> </table>	Alfalfa	Parsnips	Bananas	Pastures	Beans (dried)	Peppers	Bermudagrass	Irish Potatoes	Celery	Sweet Potatoes	Red Chicory (radicchio)	Rangeland	Citrus	Sheep	Clover	Sorghum	Coffee	Spinach	Cotton	Squash (summer and winter)	Cowpeas	Strawberries	Cucumbers	Swiss chard	Dandelions	Tobacco	Kiwi	Tomatoes	Lespedeza	Turnips	Parsley		EPA published a Federal Register notice on January 10, 2001, proposing to delete these uses from product labels.	The proposed cancellations may become effective after the 30-day public comment period, upon issuance of a cancellation order in February 2001.
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For Additional Information

For additional information on the diazinon agreement or other aspects of the Agency’s pesticide regulatory program, contact EPA’s Office of Pesticide Programs at (703) 305-5017, or visit our web site, www.epa.gov/pesticides.

For information on pesticides and their toxicity, contact the National Pesticide Telecommunications Network at 1-800-858-7378.