Overview

Azinphos-methyl, or AZM, is a general organophosphate insecticide used on nuts, vegetables, and fruits. It was first registered in 1959. It is now only used in cases where it is economically beneficial and where there are no viable alternatives. Around 2 million pounds are used annually.

Just the facts

Physical Information

Name: Azinphos-Methyl
Use: insecticide
Source: organic chemistry
Recommended daily intake: none
Absorption: dermal ingestion inhalation
Sensitive individuals: workers
Toxicity/symptoms:
Regulatory facts: highly regulated
Environmental:
Recommendations: avoid

Chemical Structure
Chemical Description

AZM is a colorless solid at room temperature that is readily soluble in most solvents

Uses and Benefits

AZM has been used extensively on a vast number of crops in the past with different affects. Some crops saw great benefits while other saw little. The majority of use of AZM has been canceled and now only 2 million pounds are used annually on crops which benefit greatly from the insecticide and where there are no viable alternatives. There are no residential or public uses of the insecticide Health Effects

The health effects of extreme AZM exposure are common with all organophosphate poisonings (#PesticideInfo):
* Convulsions
* Dizziness
* Headache
* Sweating
* Labored breathing
* Nausea
* Unconsciousness
* Pupillary constriction
* muscle cramp
* excessive salivation
* Wheezing
Precautions

The threat to consumers of AZM exposure is negligible. Workers however need to wear protective clothing at all times when handling AZM. If overexposure should occur, one should get to fresh air, wash all infected clothes, and rinse eyes.

Regulation

All aspects are heavily regulated.

History

AZM was first registered as an insecticide by the US Food and Drug Administration (FDA) in 1959. Its status was reviewed in the 1988 Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and again in 1992 under the new Acute Worker Risk Strategy. In 1993, extensive fish killings off of the Louisiana coast led to the first coordinated effort at reducing AZM use. The State and AZM producers agreed to limit its use to sugarcane and immediately cancel its use if any additional fish kills occurred in the future. This agreement lasted until 1999, when all AZM registrants voluntarily canceled its use.

In August of 1999, the EPA put numerous restrictions on the application of AZM, including amount, location, and duration of application. These changes were labeled on all products containing AZM starting in 2000.

Source: http://www.toxipedia.org/display/toxipedia/Azinphos-Methyl