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READ THE ENTIRE LABEL BEFORE USING THIS PRODUCT.

USE ONLY IN ACCORDANCE WITH INSTRUCTIONS.

KEEP OUT OF REACH OF CHILDREN

## AXAPRID 70 WP



### INGREDIENTS

Imidacloprid .....70%  
Other ingredients .....30%

AXAPRID 70 WP is a systemic, chloro-nicotinyl insecticide with soil, seed and foliar uses and contains as its active ingredient Imidacloprid 70 WP.

AXAPRID 70 WP is effective for the control of sucking insects including rice hoppers, aphids, thrips, whiteflies, termites, turf insects, soil insects and some beetles. It is most commonly used on rice, cereal, maize, potatoes, vegetables, sugar beets, fruit, cotton, hops and turf, and is especially systemic when used as a seed or soil treatment.

Formulations are available as dustable powder, granular, seed dressing (flowable slurry concentrate), soluble concentrate, suspension concentrate, and wettable powder. Typical application rates range from 0.05 - 0.125 pounds/acre. These application rates are considerably lower than older, traditionally used insecticides. It can be phytotoxic if it is not used according to manufacturer's specifications, and has been shown to be compatible with fungicides when used as a seed treatment to control insect pests.

Trade Names Of Other Firms: Trade names for products containing Imidacloprid include Admire, Condifor, Gaucho, Premier, Premise, Provado, and Marathon.

### What is Imidacloprid 70 WP and how does it work?

AXAPRID 70 WP works by interfering with the transmission of stimuli in the insect nervous system. Specifically, it causes a blockage in a type of neuronal pathway (nicotinic) that is more abundant in insects than in warm-blooded animals (making the chemical selectively more toxic to insects than warm-blooded animals). This blockage leads to the accumulation of acetylcholine, an important neurotransmitter, resulting in the insect's paralysis, and eventually death. It is effective on contact and via stomach action.

### Key Benefits of AXAPRID 70 WP:

1. Quick knockdown effect.
2. Highly effective against target pests
3. Available in other formulations for application flexibility

### PRECAUTIONS

Harmful if swallowed, inhaled or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing dust or vapor. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Keep children or pets away from treated area until dry.

### SYMPTOMS OF POISONING

Irritation on skin or eyes.

### MEDICAL TREATMENT

Treatment is symptomatic.

### FIRST AID

If swallowed, call a physician or Poison Control Center. Drink one or two glasses of water and induce vomiting by touching back of throat with finger or if available, by administering syrup of ipecac. Administer 1 tablespoon (15 ml) of syrup of ipecac followed by 1 to 2 glasses of water. If vomiting does not occur within 20 minutes, repeat the dose once. Do not induce vomiting or give anything by mouth to an unconscious person. If on skin, wash thoroughly with soap and water. Get medical attention if irritation occurs. If in eyes, hold eyelids open and flush with plenty of water.

### DIRECTIONS OF USE

Crop	Pests	oz ai/acre
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were no carcinogenic effects in a 2-year carcinogenicity study in rats fed up to 1,800 ppm imidacloprid.

- **Organ Toxicity:** In short-term feeding studies in rats, there were thyroid lesions associated with very high doses of imidacloprid.
- **Fate in Humans and Animals:** Imidacloprid is quickly and almost completely absorbed from the gastrointestinal tract, and eliminated via urine and feces (70-80% and 20-30%, respectively, of the 96% of the parent compound administered within 48 hours). The most important metabolic steps include the degradation to 6-chloronicotinic acid, a compound that acts on the nervous system as described above. This compound may be conjugated with glycine and eliminated, or reduced to guanidine.

## ECOLOGICAL EFFECTS

- **Effects on Birds:** Imidacloprid is toxic to upland game birds. The LD50 is 152 mg/kg for bobwhite quail, and 31 mg/kg in Japanese quail. In studies with red-winged blackbirds and brown-headed cowbirds, it was observed that birds learned to avoid imidacloprid treated seeds after experiencing transitory gastrointestinal distress (retching) and ataxia (loss of coordination). It was concluded that the risk of dietary exposure to birds via treated seeds was minimal. Based on these studies, imidacloprid appears to have potential as a bird repellent seed treatment.
  - **Effects on Aquatic Organisms:** The toxicity of imidacloprid to fish is moderately low. The 96-hour LC50 of imidacloprid is 211 mg/l for rainbow trout, 280 mg/l for carp, and 237 mg/l for golden orfe. In tests with the aquatic invertebrate Daphnia, the 48-hour EC50 (effective concentration to cause toxicity in 50% of the test organisms) was 85 mg/l. Products containing imidacloprid may be very toxic to aquatic invertebrates.
  - **Effects on Other Animals (Nontarget species):** Imidacloprid is highly toxic to bees if used as a foliar application, especially during flowering, but is not considered a hazard to bees when used as a seed treatment.
- **Breakdown of Chemical in Soil and Groundwater:** The half-life of imidacloprid in soil is 48-190 days, depending on the amount of ground cover (it breaks down faster in soils with plant ground cover than in fallow soils). Organic material aging may also affect the breakdown rate of imidacloprid. Plots treated with cow manure and allowed to age before sowing showed longer persistence of imidacloprid in soils than in plots where the manure was more recently applied, and not allowed to age. Imidacloprid is degraded stepwise to the primary metabolite 6-chloronicotinic acid, which eventually breaks down into carbon dioxide. There is generally not a high risk of groundwater contamination with imidacloprid if used as directed. The chemical is moderately soluble, and has moderate binding affinity to organic materials in soils. However, there is a potential for the compound to move through sensitive soil types including porous, gravelly, or cobbly soils, depending on irrigation practices.
  - **Breakdown of Chemical in Surface Water:** The half-life in water is much greater than 31 days at pH 5, 7 and 9. No other information was found.
  - **Breakdown of Chemical in Vegetation:** Imidacloprid penetrates the plant, and moves from the stem to the tips of the plant. It has been tested in a variety of application and crop types, and is metabolized following the same pathways. The most important steps were loss of the nitro group, hydroxylation at the imidazolidine ring, hydrolysis to 6-chloronicotinic acid and formation of conjugates.
  - **Analytical Methods:** Methods are available for determining imidacloprid residues (the 6-chloropicolyl moiety) in plant materials using HPLC with u.v. detection.

## PHYSICAL PROPERTIES AND GUIDELINES

### Physical Properties:

- **Appearance:** Colorless crystals with a weak characteristic odor.
- **Chemical Name:** 1-(6-chloro-3-pyridylmethyl)-N-nitroimidazolidin-2-ylideneamine, 1-[(6-chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine.

## ENVIRONMENTAL FATE

- **CAS Number:** 13826-41-3
- **Molecular Weight:** 255.7
- **Water Solubility:** 0.51 g/l (200 degrees C)
- **Solubility in Other Solvents:** @ 20 degrees C: dichloromethane - 50.0 - 100.0 g/l; isopropanol - 1.0-2.0 g/l; toluene - 0.5-1.0 g/l; n-hexane - <0.1 g/l; fat - 0.061 g/100g
- **Melting Point:** 136.4-143.8 degrees C., 143.8 degrees C (crystal form 1) 136.4 degrees C (crystal form 2)
- **Vapor Pressure:** 0.2 uPa (20 degrees C) (1.5 X 10 to the minus 9 mmHg)
- **Partition Coefficient:** 0.57 (22 degrees C). (1)
- **Adsorption Coefficient:** Not Available



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