

MATERIAL SAFETY DATA SHEET

SECTION 1 Chemical product and Company identification

Product Name: ORIZON EC

Common name: Acetamiprid; Abamectin

Chemical name: (acetamiprid)(*E*)-*N*¹-[(6-chloro-3-pyridyl)methyl]-*N*²-cyano-*N*¹-methylacetamidine;

(abamectin) 5-O-demethylavermectin A_{1a} (i) mixture with

5-O-demethyl-25-de(1-methylpropyl)-25-(1-methylethyl)avermectin

Formula: (acetamiprid) $C_{10}H_{11}ClN_4$; (abamectin) $C_{48}H_{72}O_{14}$, $C_{47}H_{70}O_{14}$

Product Use: Commercial insecticide.

SECTION 2 Composition/Information on Ingredients

Chemical Name	Wt.	CAS RN
Acetamiprid	100g/lt	135410-20-7
Abamectin	20g/lt	71751-41-2

SECTION 3 Hazards Identification

Health effects

ACUTE:

Caution. Hazard to humans and domestic animals. Keep out of reach of children.

Acute if Ingested: Hazard to humans and domestic animals.

Eye: Immediate effects, avoid contact with eyes.

Skin: Harmful if absorbed through skin. Avoid contact with skin or clothing. Skin contact may aggravate existing skin disease.

Inhalation: Harmful if inhaled. Avoid breathing dust. Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis.

CHRONIC:

This product does not contain any ingredients as probable or suspected human carcinogens.

SECTION 4 First Aid Measures

If poisoning is suspected, immediately contact a physician, the nearest hospital, or the nearest Poison Control Center. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given.

Ingestion: Immediately call a poison control center or doctor for treatment advice. Do not induce vomiting unless directed to do so by a physician or poison control center. Have a person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.



Eye Contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin Contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation: Move person to fresh air. If person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

SECTION 5 Fire Fighting Measures

Fire and Explosion

Flash Point: Not available.

Flammable Limits (% In Air): Not Available

Autoignition Temperature: Not available.

In Case of Fire

Use dry chemical, foam, water spray, or CO₂, extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes, or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated.

Unusual Fire, Explosion and Reactivity Hazards

Like all organic and most dry chemicals, as a powder or dust, this product (when mixed with air in critical proportions and in the presence of an ignition source) may present an explosion hazard.

SECTION 6 Accidental release measures

In Case of Spill or Leak

Wear chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering and a NIOSH-approved chemical cartridge respirator with pesticide prefilter, or air supplied respirator. Sweep up and place in an appropriate closed container. No sparking tools should be used. Avoid creation of dusty conditions. Clean up residual material by washing area with water and detergent. Collect washings for disposal. Decontaminate tools and equipment following cleanup. Do not allow wash water to contaminate water supplies.

SECTION 7 Handling and storage

Do not store in or around the home. Store unused product in a cool, ventilated, dry, locked area out of the reach of children and domestic animals. Never transfer this product to another container for storage. Do not store food, beverages, or tobacco products in the storage area. Prevent eating, drinking, tobacco usage, and cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after



handling.

To avoid eye contact, wear chemical safety glasses or goggles.

To avoid skin contact, wear rubber gloves, rubber boots, long-sleeved shirt, long pants and head covering. Discard heavily contaminated articles that cannot be washed.

To avoid breathing spray or mist, wear a NIOSH-approved chemical cartridge respirator with organic vapor cartridge and pesticide prefilter or air-supplied respirator.

Do not enter or allow worker entry into treated areas during the restricted entry interval of 12 hours.

SECTION 8 Exposure controls/Personal protection

Engineering controls: Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: general area dilution/exhaust ventilation.

Personal protection: Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z 87 approved equipment should be selected for the particular use intended for this material. Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area. Applicators and other handlers must wear long-sleeved shirts and long pants, waterproof gloves, shoes plus socks and chemical resistant headgear for overhead exposure. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

SECTION 9 Physical & Chemical properties

Appearance: Yellow transparent liquid

Solubility in H₂O: EC

pH value: 5-8

Water content: 0.5% max

SECTION 10 Stability & Reactivity

Reactivity

Stability: Stable in buffered solutions at pH 4, 5, 7. Degraded slowly at pH 9 and 45 °C. Stable under sunlight.

Hazardous Polymerization: Will Not Occur

Conditions to Avoid: Strong alkaline

SECTION 11 Toxicological Information

Acute Toxicity /Irritation Studies(tech)

Oral: LD₅₀ for rats >2000 mg/kg body weight

Dermal: LD₅₀ for rat > 2000 mg/kg body weight



Inhalation: Inhalation LC₅₀ (Rat) > 3.17 mg/L air - 4 hours

Eye Contact: Non-irritating (Rabbit)

Skin Contact: Non-irritating (Rabbit)

Sensitization: Non-sensitizing (Guinea pig)

SECTION 12 Ecological Information

Product is moderately toxic to birds and fish.

Birds: Acute oral LD₅₀ for mallard ducks 190 mg/kg.

Fish: LC₅₀ (24-96 h) for carp > 100 mg/L.

Daphnia: LC₅₀(3-6 h) > 1000 mg/L

SECTION 13 Disposal Considerations

Do not contaminate water, food, or feed by disposal. Contamination with this product will render water, food or feed unfit for human or animal consumption. Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. If burned, stay out of smoke.

SECTION 14 Transport Information

DOT/IATA/IMO:

UN No.: 2588

UN Hazard Class: 6.1

Do not transport with food and feedstuffs.

Other Information

The information contained in the Material Safety Data Sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for with other materials or in processes other than those specifically described herein.

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