

# Sodium 5-Nitroguaiacolate (129075), Sodium o-Nitrophenolate (129076), Sodium p-Nitrophenolate (129077) Fact Sheet

## Summary

These nitrophenolates occur naturally in plants, where they act as growth regulators. When used as growth enhancers, these substances do not present any known risks to humans or the environment.

### I. Description of the Active Ingredient

**Active Ingredient Name:** Sodium 5-Nitroguaiacolate

**OPP Chemical Code:** 129075; (CAS # 67233-85-6)

**Active Ingredient Name:** Sodium o-Nitrophenolate

OPP Chemical Code: 129076; (CAS # 824-39-5)

**Active Ingredient Name:** Sodium p-Nitrophenolate

OPP Chemical Code: 129077; (CAS # 824-78-2)

The three active ingredients above (nitrophenolates) are plant growth regulators that occur in plants. They are similar to each other in structure, toxicity, and in how they affect plants. When applied to plants, these three nitrophenolates are rapidly converted to other chemicals naturally found in plants. Researchers have proposed that these active ingredients stimulate plant growth by altering the activity of two specific enzymes found in plants.

### II. Use Sites, Target Pests, And Application Methods

- **Use Sites:** Cotton, rice, soybeans
- **Target pests:** Growth enhancer
- **Application Methods:** The end-product is diluted and sprayed on leaves twice per season, at specified developmental stages for each crop.

### III. Assessing Risks to Human Health

No adverse effects to humans are expected from use of pesticide products containing these nitrophenolates. First, plants rapidly convert these nitrophenolates to other harmless natural substances. Second, the tiny amounts applied to crops do not affect the exposure of people who eat the treated crops. (In high concentrations, these nitrophenolates are eye irritants.)

#### **IV. Assessing Risks to the Environment**

Toxicity tests on various species showed that no harmful effects are expected from use of these nitrophenolates as plant growth regulators. Used only in tiny amounts, the active ingredients are rapidly converted to harmless other natural substances.

#### **V. Regulatory Information**

The three active ingredients above were registered (licensed for sale and distribution) in 1995 for use in pesticide products. As of August 2000, there was one pesticide end product that used tiny amounts of each of these nitrophenolates.

#### **VI. Registrant Information**

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#### **VII. Additional Contact Information**

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