

Please read instructions on reverse before completing form.

Form Approved, OMB No. 2070-0080, Approval expires 2-28-95



United States  
Environmental Protection Agency  
Washington, DC 20460

Registration  
 Amendment  
 Other

OPP Identifier Number

Application for Pesticide - Section I

|  |  |  |
|--|--|--|
| 1. Company/Product Number<br>7969-124  | 2. EPA Product Manager<br>Mary Waller  | 3. Proposed Classification<br><input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted |
| 4. Company/Product (Name)<br>Cvanus fungicide  | PM#<br>21  |  |
| 5. Name and Address of Applicant (Include ZIP Code)<br>BASF Corporation, Agricultural Products<br>P.O. Box 13528<br>Research Triangle Park, NC 27709-3528<br><input type="checkbox"/> Check if this is a new address | 6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:<br>EPA Reg. No. _____<br>Product Name _____ |  |

Section - II

|  |   |                                    |
|--|---|------------------------------------|
| <input type="checkbox"/> Amendment - Explain below.                            | <input checked="" type="checkbox"/> Final printed labels in response to Agency letter dated _____ | <b>NOTIFICATION</b><br>JUL 19 2000 |
| <input type="checkbox"/> Resubmission in response to Agency letter dated _____ | <input type="checkbox"/> "Me Too" Application.  |                                    |
| <input checked="" type="checkbox"/> Notification - Explain below.              | <input type="checkbox"/> Other - Explain below.   |                                    |

Explanation: Use additional page(s) if necessary. (For section I and Section II.)  
Add restriction of use in Nassau and Suffolk counties in New York to a supplemental label (restriction already exists on main label)

Section - III

|   |  |   |  |   |                   |
|---|--|---|--|---|-------------------|
| 1. Material This Product Will Be Packaged In:   |  |   |  | 2. Type of Container  |                   |
| Child-Resistant Packaging<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No   | Unit Packaging<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No | Water Soluble Packaging<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No | Metal<br><input checked="" type="checkbox"/> Plastic<br><input type="checkbox"/> Glass<br><input type="checkbox"/> Paper<br><input type="checkbox"/> Other (Specify) _____ |   |                   |
| * Certification must be submitted   |  | If "Yes" Unit Packaging wgt.  | No. per container  | If "Yes" Package wgt.   | No. per container |
| 3. Location of Net Contents Information<br><input checked="" type="checkbox"/> Label <input type="checkbox"/> Container   |  | 4. Size(s) Retail Container<br>1 lb   |  | 5. Location of Label Directions<br><input checked="" type="checkbox"/> on label |                   |
| 6. Manner in Which Label is Affixed to Product<br><input type="checkbox"/> Lithograph<br><input type="checkbox"/> Paper glued<br><input type="checkbox"/> Stenciled |  |   | <input checked="" type="checkbox"/> Other sleeve   |   |                   |

Section - IV

|   |                                    |  |
|---|------------------------------------|--|
| 1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)   |                                    |  |
| Name<br>Karen R. Blundell   | Title<br>Registration Scientist    | Telephone No. (Includes Area Code)<br>(919) 547-2979 |
| <b>Certification</b><br>I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete.<br>I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. |                                    | 6. Date Application Received<br>(Stamped)            |
| 2. Signature<br><i>Karen R. Blundell</i>  | 3. Title<br>Registration Scientist |  |
| 4. Typed Name<br>Karen R. Blundell  | 5. Date<br>July 5, 2000            |  |

# Cygnus<sup>®</sup>

## fungicide

JUL 19 2000

For use on ornamentals in nurseries and on commercial plantings around industrial sites

EPA Reg. No. 7969-124

All applicable directions, restrictions, precautions and Conditions of Sale and Warranty on the EPA-registered label are to be followed. This labeling must be in the possession of the user at the time of application.

### Directions For Use

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

### General Information

This package contains **Cygnus<sup>®</sup> fungicide**, a 50% water-dispersible granule (WG). **Cygnus** is a foliar fungicide that has protective, curative, and eradicant activity against powdery mildews, and protective activity against leaf spots and rusts. For best results against powdery mildews, leaf spots and rusts, however, a protective barrier of **Cygnus** must be established and maintained on the plant surface (refer to Table 1). **Cygnus** should be used in a rotation program with other effective non-strobilurin fungicides.

### Mode of Action

The active ingredient in **Cygnus** is kresoxim-methyl, which belongs to the strobilurin class of fungicides and is a mitochondrial electron transport inhibitor.

### Crop Tolerance

The phytotoxic potential of **Cygnus** has been assessed on a wide variety of common ornamental plants with no phytotoxicity observed. Refer to Table 2 for the list of plants shown to be tolerant to **Cygnus**. Refer to Table 3 for those plants not tolerant to **Cygnus**. However, all plant species and their varieties and cultivars have not been tested with possible tank mix combinations, sequential pesticide treatments, and adjuvants or surfactants. Local conditions can also influence crop tolerance and may not match those under which TopPro has conducted testing. Therefore, before using **Cygnus**, test the product on a sample of the crop to be treated to ensure that a phytotoxic response will not occur.

### Cleaning Spray Equipment

Spraying equipment must be cleaned thoroughly before and after applying this product, particularly if a product with the potential to injure crops was used prior to **Cygnus**.

**Resistance Management**

The repeated and exclusive use of **Cygnus® fungicide**, as with many other fungicides, may allow less sensitive strains of the target fungi to build over time and may reduce disease control. To maintain the performance of **Cygnus**, BASF advises strict adherence to the following resistance management strategies:

- BASF recommends that no more than six applications of **Cygnus** be made per season.
- BASF recommends that no more than two sequential applications of **Cygnus** be applied. Then alternate to at least an equal number of sequential applications of effective non-strobilurin fungicides with a different mode of action.

**Application Instructions**

For the control of crabapple scab, apply 1.0 to 1.6 ounces of **Cygnus** in 100 gallons of water at 10-14 day intervals as a preventative treatment. Start applications at bud break or when environmental conditions are favorable for disease development. Use the higher rate of **Cygnus** when heavy infection pressure exists or is anticipated.

For the control of rose black spot and ornamental leaf spots, apply 1.6-3.2 ounces of **Cygnus** in 100 gallons of water at 7-14 day intervals as a preventative treatment.

For the control of powdery mildew, apply 1.6-3.2 ounces of **Cygnus** as a preventative treatment or at the first signs of disease. Applications made at the first signs of powdery mildew will require higher rates and shorter spray intervals. The addition of up to 0.06 % of a non-organosilicone spreader-sticker type adjuvant may improve powdery mildew control.

For the control of rusts, apply **Cygnus** strictly as a preventative treatment at 3.2-6.4 oz/100 gallons at 7-10 day intervals. The addition of up to 0.06 % of a non-organosilicone spreader-sticker type adjuvant may improve rust control.

Spray to the point of drip for all applications, making sure not to exceed the maximum seasonal use rate. Refer to Table 1 for specific recommendations for disease control.

**Spray Coverage**

Apply the appropriate amount of spray solution to cover the foliage to the point of drip. Thorough coverage of the plants is required for optimum disease control.

**Additives**

Additives or spray adjuvants are usually not necessary for use with **Cygnus**. The addition of up to 0.06% of a non-organosilicone spreader-sticker type adjuvant may improve spray coverage and control of certain diseases. Do not use organosilicone-based adjuvants with **Cygnus**, as crop phytotoxicity may result on certain ornamental species. Consult a BASF representative or local agricultural authorities for more information concerning additives.

**Mixing Order**

- 1) Water: Begin by agitating a thoroughly clean sprayer tank half full of clean water.
- 2) Products in PVA bags: The water-soluble PVA bag will dissolve in water to allow the contents to disperse. Wait until all water-

soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.

- To prepare spray solution for large volume application, use a mixing tank or mixing vat first to get the product into suspension before transferring suspension to application equipment.

- 3) Water-dispersible products: such as **Cygnus® fungicide**
- 4) Water-soluble products
- 5) Emulsifiable concentrates
- 6) Water-soluble additives
- 7) Remaining quantity of water

Maintain constant agitation during application.

**General Tank Mixing Information**

**Cygnus** may be tank mixed with most registered fungicides and insecticides. However, all varieties and cultivars have not been tested with possible tank mix combinations. Local conditions can influence crop tolerance and may not match those under which BASF has conducted testing. Before using any tank mix (fungicides, insecticides, plant growth regulators, additives or spray adjuvants), test the combination on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of applications.

**General Restrictions and Limitations**

- Do not apply more than a total of 25.6 ounces (1.6 pounds) of **Cygnus** fungicide per acre per season
- Restricted Entry Interval (REI): 12 hours.
- Do not apply to crops subjected to stress conditions, such as excessive heat.
- Do not apply to crops that show injury (leaf phytotoxicity or plant stunting) produced by prior pesticide applications.
- Do not apply through any type of irrigation equipment.
- **Cygnus** is not for sale, distribution, or use in Nassau and Suffolk Counties in New York State. In the remainder of the state, read and follow all applicable directions, restrictions and precautions on this label.

Table 1. Application Rates and Timings

| Disease   | Application interval  | Cygnus rates per 100 gallons |
|---|---|------------------------------|
| Crabapple scab<br><i>Venturia inaequalis</i>  | Begin at bud break or when environmental conditions are favorable for disease development and continue on a 10-14 day interval.   | 1.0-1.6 ounces               |
| Powdery mildews<br><i>Erysiphe</i> sp.<br><i>Microsphaera</i> sp.<br><i>Oidium</i> sp.<br><i>Phyllactinia</i> sp.<br><i>Sphaerotheca</i> sp.<br><i>Uncinula</i> sp. | Apply as a protective spray or at the first signs of disease. Continue on a 7-14 day interval. Applications made at the first signs of disease require shorter spray intervals. | 1.6-3.2 ounces               |
| Rose black spot<br><i>Diplocarpon rosae</i><br>Leaf spots<br><i>Alternaria</i> sp.<br><i>Didymellina</i> sp.<br><i>Septoria</i> sp.                                 | Apply as a protective spray and continue on a 7-14 day interval.  | 1.6-3.2 ounces               |
| Snapdragon rust<br><i>Puccinia antirrhini</i><br>Dianthus rust<br><i>Puccinia dianthi</i><br>Chrysanthemum rust<br><i>Puccinia horiana</i>                          | Apply strictly as a protective spray and continue on a 7-10 day interval.   | 3.2-6.4 ounces               |

**Table 2. Plants Tolerant to Cygnus.** Plants in this table have been found to be tolerant to Cygnus when it is applied according to the use recommendations stated in this label. Do not use fruit from ornamental plants for food or feed purposes.

**Common name**

Ageratum  
Alberta spruce  
Alstroemeria  
Aster  
Azalea  
Carnation  
Chrysanthemum  
Chinese magnolia  
Crabapple

**Scientific name**

*Ageratum houstonianum*  
*Picea glauca* var. *albertiana*  
*Alstroemeria* sp.  
*Aster* sp.  
*Rhododendron* sp.  
*Dianthus* sp.  
*Chrysanthemum* sp.  
*Magnolia soulangiana*  
*Malus* sp.

|                       |                              |
|-----------------------|------------------------------|
| Crape myrtle          | <i>Lagerstroemia</i> sp.     |
| Currant               | <i>Ribes</i> sp.             |
| Dahlia                | <i>Dahlia</i> sp.            |
| Dogwood               | <i>Cornus</i> sp.            |
| Dracaena              | <i>Dracaena marginata</i>    |
| Dusty miller          | <i>Centaurea cineraria</i>   |
| English cherry laurel | <i>Prunus laurocerasus</i>   |
| English hawthorn      | <i>Crataegus monogyna</i>    |
| English oak           | <i>Quercus robur</i>         |
| Euonymus              | <i>Euonymus</i> sp.          |
| Gazania               | <i>Gazania</i> sp.           |
| Geranium              | <i>Pelargonium</i> sp.       |
| Gerbera               | <i>Gerbera</i> sp.           |
| Gladiolus             | <i>Gladiolus</i> sp.         |
| Hawthorn              | <i>Crataegus</i> sp.         |
| Hedge maple           | <i>Acer campestre</i>        |
| Honeysuckle           | <i>Lonicera</i> sp.          |
| Hydrangea             | <i>Hydrangea</i> sp.         |
| Impatiens             | <i>Impatiens</i> sp.         |
| Iris                  | <i>Iris</i> sp.              |
| Juniper               | <i>Juniperus</i> sp.         |
| Lilac                 | <i>Syringa</i> sp.           |
| Lily                  | <i>Lilium</i> sp.            |
| Limonium              | <i>Limonium</i> sp.          |
| Loquat                | <i>Eriobotrya japonica</i>   |
| Marigold              | <i>Tagetes</i> sp.           |
| Monarda               | <i>Monarda</i> sp.           |
| Oak                   | <i>Quercus</i> sp.           |
| Pansy                 | <i>Viola</i> sp.             |
| Petunia               | <i>Petunia</i> sp.           |
| Phlox                 | <i>Phlox</i> sp.             |
| Poinsettia            | <i>Euphorbia pulcherrima</i> |
| Portulaca             | <i>Portulaca</i> sp.         |
| Potentilla            | <i>Potentilla fruticosa</i>  |
| Rose                  | <i>Rosa</i> sp.              |
| Serviceberry          | <i>Amelanchier ovalis</i>    |
| Southern maple        | <i>Acer barbatum</i>         |
| Sprenger asparagus    | <i>Asparagus densiflorus</i> |
| Spiderwort            | <i>Tradescantia</i> sp.      |
| Spirea                | <i>Spiraea</i> sp.           |
| Sycamore maple        | <i>Acer pseudoplatanus</i>   |
| Swamp chestnut oak    | <i>Quercus prinus</i>        |
| Tick seed             | <i>Coreopsis</i> sp.         |
| Tulip                 | <i>Tulipa</i> sp.            |
| Verbena               | <i>Verbena</i> sp.           |
| Veronica              | <i>Veronica</i> sp.          |
| Vilburnum             | <i>Viburnum</i> sp.          |
| Water oak             | <i>Quercus nigra</i>         |
| Yew                   | <i>Taxus</i> sp.             |
| Zinnia                | <i>Zinnia</i> sp.            |

**Table 3. Plants Not Tolerant to Cygnus**  
**(do not expose these species or varieties to Cygnus):**

| Common name  | Scientific name                                |
|--|--|
| Norway maple<br>Sweet cherry<br>Sensitive varieties:<br>Somerset, Sweetheart,<br>Valera, Van, Vandalay | <i>Acer platanoides</i><br><i>Prunus avium</i> |

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