

# Specimen Label



# Empire\* 20

## Specialty Insecticide

\*Trademark of Dow AgroSciences LLC

### Microencapsulated Insecticide

**Controls numerous pests in and around households and other structures and in Food Service Establishments**

**To be applied only by, or under the supervision of commercial applicators responsible for pest control programs**

#### Active Ingredient:

chlorpyrifos: O, O-diethyl-O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate ..... 20%

Inert Ingredients ..... 80%

Total ..... 100%

Contains 1.7 pounds of chlorpyrifos per gallon.



1. Tip



2. Level



3. Dispense

1. Remove the measuring chamber cap and induction seal. Replace cap and securely tighten. Tip container until liquid fills measuring chamber.
2. Return container to level position. No adjustment is needed.
3. Remove measuring chamber cap and dispense into proper application equipment.

**For multiple dose measuring:** Remove fill chamber cap and dispense according to markings on side of bottle.

EPA Reg. No. 62719-88

## Keep Out of Reach of Children

## CAUTION PRECAUCION

**Precaucion al usuario:** Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

### Precautionary Statements

#### Hazards to Humans and Domestic Animals

May Be Harmful If Swallowed • Harmful If Absorbed Through Skin

**Do not get in eyes, on skin, or on clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating or smoking. Remove contaminated clothing and wash before reuse. Keep away from food, feedstuffs, and water supplies.**

#### First Aid

**If swallowed:** Call a physician or Poison Control Center immediately. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not give anything by mouth to an unconscious person.

**If on skin:** Wash with plenty of soap and water. Get medical attention if irritation develops.

**If in eyes:** Flush with plenty of water for 5 minutes. Get medical attention if irritation persists.

**If inhaled:** Remove to fresh air if symptoms of cholinesterase inhibition appear and get medical attention immediately.

**Note to physician:** Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration.

#### Environmental Hazards

This pesticide is toxic to birds and wildlife. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Do not contaminate water by cleaning of equipment or disposal of waste. Do not contaminate water when disposing of equipment washwaters.

**Notice:** Read the entire label. Use only according to label directions. **Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" elsewhere on this label.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at [www.dowagro.com](http://www.dowagro.com).

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

### Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

**Do not formulate this product into other end-use products. Do not tank mix this product with products containing dichlorvos (DDVP).**

## Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal.

**Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Avoid storing above 122°F for extended periods of time. Storage below 40°F may result in formation of crystals. If product crystallizes, store at 55 to 75°F - shake occasionally to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**Container Disposal for Non-refillable Containers:** Triple rinse (or equivalent) then offer for recycling or reconditioning, or puncture and/or crush rinsed, empty container and dispose of in a sanitary landfill, or other procedures approved by state and local authorities. Then dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Container Disposal for Refillable Containers:** Replace the dry disconnect cap, if applicable, and seal all openings which have been opened during use. Return the empty container to a collection site designated by Dow AgroSciences. If the container has been damaged and cannot be returned according to the recommended procedures, contact Dow AgroSciences Customer Service Center at 1-800-258-1470 to obtain proper handling instructions.

## General Information

Empire\* 20 insecticide is a flowable microencapsulated concentrate designed for use as a residual spray to control various pests in and around residential and non-residential structures. Empire 20 may be sprayed on any surface which will not be damaged or stained by water. A visible deposit may appear on some dark surfaces. This deposit can be easily removed with a cloth or damp sponge.

## General Use Precautions and Restrictions

Do not formulate this product into other end-use products.

Do not tank mix this product with dichlorvos (DDVP) containing products.

Do not allow spray to contact food, feedstuffs, or water supplies.

Empire 20 may be tank mixed with Insect Growth Regulators and other chemically compatible products.

Do not allow spray to contact food or food-contacting surfaces. Thoroughly wash dishes and food handling utensils with soap and water if they become contaminated by application of this product.

Do not use in fogging equipment.

Do not allow adults or children on treated areas (or surfaces) until spray has dried.

Do not apply water based sprays of this product to conduits, motor housings, junction and switch boxes, or other electrical equipment because of possible shock hazard.

**Pets:** Cover fish bowls (tanks) before spraying. **Do not treat pets with this product.** Pets must not contact treated surfaces until the spray has dried. Keep out of fishpools or other bodies of water.

## Mixing Directions

Thoroughly clean spray equipment before using Empire 20. Shake concentrate well before diluting so that material is thoroughly dispersed. When diluting, add water to the spray tank and the appropriate amount of Empire 20. **Agitate the sprayer before using**, and occasionally during use, to ensure even coverage. Re-agitate sprayer if dilution is left in sprayer overnight. **If spray screens are used, they should be 50 mesh or larger.** Dilute Empire 20 with water only.

Amount of Empire 20 to Make 1 Gallon of Finished Spray			
% Concentration of Sprayer Mixture	0.2%	0.4%	0.5%
Empire 20	1 1/3 fl oz	2 2/3 fl oz	3 1/3 fl oz

## Approved Uses

### General Pest Control Indoors

#### General Directions for Use

Empire 20 may be applied within residential and non-residential buildings or structures and within industrial, institutional, and commercial buildings and vehicles. Applications can be made in food service establishments such as restaurants, cafeterias, taverns, delicatessens, mess halls, school and institutional dining areas, hospitals, mobile canteens, vending machines, groceries, and markets. Applications can also be made in non-food areas of food manufacturing and food processing establishments including garbage rooms, lavatories, entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets, and storage rooms (after canning or bottling). Empire 20 may also be applied to livestock housing structures and pet kennels in areas of the facility where animals are not present. Treat where insects are found or normally occur. Apply Empire 20 as a spot or crack and crevice spray only, unless otherwise indicated in specific use directions. Indoor broadcast applications of Empire 20 are prohibited. Application of a 0.2% solution is suitable for control of light pest infestations (i.e., maintenance applications). Application of a 0.4% solution provides residual control of heavy infestations (i.e., clean-out applications). Where extended residual control is desired, apply Empire 20 at a rate of 0.5% solution. Limit retreatments to no more often than once per 7 days (14 days in food service establishments). Apply spray solutions in such a manner as to minimize spray drift to nontarget surfaces. **Cabinet Interiors:** When treating interiors of cabinets containing food or food utensils, remove or otherwise protect such items from contact with spray. Allow spray to dry before returning food or food utensils to treated cabinets. Prevent the above items from directly contacting treated surfaces. Shelf liners or similar material can provide adequate protection from treated surfaces. Thoroughly wash dishes, food utensils, or food-contacting surfaces with soap and water if they are directly exposed to this product.

**General Directions for Use In Food Service Establishments**

Empire 20 may be applied in food and non-food areas of food service establishments such as restaurants and cafeterias. Application within food service establishments is limited to spot and/or crack and crevice treatments. Treat where insects are found or normally occur. Application of a 0.2% solution is suitable for control of light pest infestations (i.e., maintenance applications). Application of a 0.4% solution provides residual control of heavy infestations (i.e., clean-out applications). For extended residual control, apply a 0.5% solution of Empire 20. For crack and crevice treatments, apply small amounts of material directly into openings leading to voids and hollow spaces in walls, equipment legs and bases, or which occur at points between elements of construction, or between equipment and floors. Equipment capable of delivering a pinstream of spray should be used for crack and crevice application. Repeat treatment as needed but not more than once every 14 days. Applications of this product in food service establishments other than as a spot and/or crack and crevice treatment are not permitted. Apply spray solutions in such a manner as to minimize drift to nontarget surfaces. Empire 20 is approved by the USDA for use in inedible areas of federally inspected meat and poultry plants. Applications can also be made in non-food areas of food manufacturing and food processing establishments including garbage rooms, lavatories, entries and vestibules, offices, locker rooms, boiler rooms, garages, and mop closets. Care should be taken to avoid depositing the product into exposed surfaces or introducing the material into the air. Avoid contamination of food, food utensils, or food processing surfaces.

**Indoor Pests Controlled by Empire 20†**

Use Empire 20 to control pests such as, but not limited to, those listed in the following table by application at the recommended dosages.

Ants <sup>1</sup>	Crickets	Mediterranean
Brown dog ticks <sup>2</sup>	Earwigs	flour moths
Carpet beetles <sup>3</sup>	Firebrats	Millipedes
Centipedes	Fleas <sup>5</sup>	Rice weevils
Clover mites	Flies <sup>6</sup>	Silverfish
Cockroaches <sup>4</sup>	Flour beetles	Sowbugs
(American)	(Confused)	Spiders
(Asian)	(Red)	Ticks
(Brownbanded)	(Saw-toothed)	
(German)	Indian meal moths	
(Oriental)		
(Smokybrown)		

†Superscripts refer to Specific Indoor Use Directions

**Specific Indoor Use Directions**

- Ants** may be controlled by treating ant trails and wherever else these pests may find entrance; for example, around doors and windows.
- Brown dog ticks:** Apply as a spot or crack and crevice treatment along baseboards, windows and door frames, and other areas of floor and floor coverings where these pests may be present. Old bedding should be replaced or thoroughly washed. **DO NOT TREAT PETS WITH THIS PRODUCT. Humans or pets must not contact treated surfaces until the spray has dried.**
- Carpet beetles:** Apply as a spot or crack and crevice treatment to rugs and carpets; along baseboards and edges of carpeting; under carpeting, rugs, and furniture; in closets and on shelving; and wherever else these insects are seen or suspected. **DO NOT TREAT PETS WITH THIS PRODUCT. Humans or pets must not contact treated surfaces until the spray has dried.**

- Cockroaches** are best controlled by making crack and crevice or spot treatments. Treat where insects are found or normally occur including, but not limited to, dark corners of rooms and closets; cracks, and crevices in walls; along and behind baseboards; beneath and behind sinks, stoves, refrigerators, refrigerator units, and cabinets; and around plumbing and other utility installations.
- Fleas:** Apply as a spot or crack and crevice treatment only, to infested areas such as rugs and carpets. Prior to treatment, carpets should be vacuumed thoroughly and vacuum cleaner bag discarded in an outdoor trash container. **Humans or pets must not contact treated surfaces until the spray has dried.** Old pet bedding should be replaced or thoroughly washed. **DO NOT TREAT PETS WITH THIS PRODUCT.** To control the source of flea infestations, pets inhabiting the treated premises should be treated with a flea-control product registered for application to animals.
- To control flies in livestock housing structures (including poultry houses) and pet kennels, apply Empire 20 spray to ceilings, walls, light fixtures, window frames and other fly resting areas. Product application must be restricted to surfaces inaccessible to direct contact with animals. Surfaces directly in contact with animals should not be sprayed within six feet of the floor. Timing and frequency of application should be based on nuisance levels of flies, but should not be more frequent than once every 7 days. Do not make interior applications for Empire 20 while animals are present. Keep animals out of treated area until spray has dried. Do not make applications to animals, feedstuffs or watering equipment. Do not apply in milk storage rooms. Do not contaminate milking or milk handling equipment..

**General Pest Control Outdoors**

**General Directions for Use**

Use Empire 20 to control pests, such as ,but not limited to, those listed in the accompanying table by application as either a high volume or low volume perimeter treatment.

**Treatment sites:** When used in accordance to label directions, Empire 20 may be applied to and around outside surfaces of residential and nonresidential buildings and structures. Permitted areas of use include, but are not limited to:

- band of soil around structures
- crawl spaces
- decks
- driveways
- eaves
- fences
- foundations
- garages
- patios
- refuse dumps
- walkways
- walls
- window and door frames

**Perimeter treatments:** High volume perimeter treatments help prevent infestation of buildings and may be applied at rates ranging from 10 to 20 fluid ounces per 50 gallons of spray solution. When making perimeter treatments, apply Empire 20 where pests are active or may find entrance. For example, treat a band of soil 6 to 10 feet wide around and adjacent to buildings and treat the building foundation to a height of 2 to 3 feet. Apply as a coarse spray at the rate of about 10 gallons spray mixture per 1,000 square feet to thoroughly and uniformly wet the band area.

Low volume perimeter treatments may be applied at a rate of 1 1/3 to 3 1/3 fluid ounces of Empire 20 per 1 gallon of water. Apply dilution to localized areas on outside surfaces of buildings and other outdoor areas where pests congregate or have been seen. Apply as a coarse, low pressure (less than 20 psi) spray or use other suitable equipment to minimize spray drift.

**Outdoor Pests Controlled by Empire 20†**

Use Empire 20 to control pests such as, but not limited to, those listed in the following table by application at the recommended dosages.

Ants	Earwigs	Scorpions <sup>2</sup>
Bees	Fire ants <sup>1</sup>	Silverfish
Beetles	Fleas	Sowbugs
Carpenter ants	Flies	Spiders
Carpenter bees	Hornets	Ticks
Clover mites	Millipedes	Wasps
Cockroaches	Mosquitoes	Yellowjackets
Crickets		

†Superscripts refer to Specific Outdoor Use Directions

**Specific Outdoor Use Directions**

- For individual **fire ant mounds**, apply Empire 20 as a mound drench at a rate of 1 fluid ounce per each 2 gallons of water. Satisfactory results can be expected from applying 2 gallons of dilution per mound. Adjust volume according to mound size, avoiding unnecessary runoff. Allow 7 to 10 days to achieve maximum effectiveness. Empire 20 has shown residual control of fire ants in excess of 30 days. If retreatment is necessary, limit applications to once every 14 days.
- For **scorpions**, remove accumulations of lumber, firewood, and other materials which serve as harborage sites. Before stacking firewood or lumber, apply Empire 20 as a residual spray to surfaces immediately below such materials. Band treatments may also be helpful in reducing pests immigrating from surrounding areas.

**Warranty Disclaimer**

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

**Inherent Risks of Use**

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by buyer.

**Limitation of Remedies**

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

- Refund of purchase price paid by buyer or user for product bought, or
- Replacement of amount of product used

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the "Warranty Disclaimer" above and this "Limitation of Remedies" cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the "Warranty Disclaimer" or this "Limitation of Remedies" in any manner.

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**Revisions:**

**Directions for Use:** (1) Revised "General Use Precautions" header to read "General Use Precautions and Restrictions"; and (2) Deleted recommendation for use around floor drains or drains to sewers.