

**MATERIAL SAFETY DATA SHEET**  
**ZOECON GENTROL® IGR CONCENTRATE**

**Manufacturer:** Wellmark International  
**Address:** 1501 E. Woodfield Rd., Suite 200-West, Schaumburg, IL 60173  
**Emergency Phone:** 1-800-248-7763  
**Transportation Emergency Phone:** CHEMTREC: 1-800-424-9300

**1. CHEMICAL PRODUCT INFORMATION**

**Product Name:** Zoecon Gentrol® IGR Concentrate  
**Chemical Name/Synonym:** (S)-Hydroprene: (Ethyl(2E,4E,7S)-3,7,11-trimethyl-2,4-dodecadienoate)  
**Chemical Family:** Isoprenoid  
**Formula:** C<sub>17</sub> H<sub>30</sub> O<sub>2</sub>  
**EPA Registration No.:** 2724-351  
**RF Number:** 259

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

<u>Component (chemical, common name)</u>	<u>CAS Number</u>	<u>Weight</u>	<u>Tolerance</u>
(S)-Hydroprene: (Ethyl(2E,4E,7S)-3,7,11-trimethyl-2,4-dodecadienoate)	65733-18-8	9.0%	Not established
Inert ingredients (non hazardous and/or trade secret):		91.0%	Not established

**3. HAZARD INFORMATION**

**PRECAUTIONARY STATEMENTS**

**CAUTION: Keep out of the reach of children. Avoid contact with eyes, skin or clothing. Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Wash thoroughly with soap and water after handling.**

**SIGNS AND SYMPTOMS OF OVEREXPOSURE**

No known health conditions are aggravated by exposure to this product.

**PRIMARY ROUTE OF ENTRY**     Dermal/Eye: Yes                     Oral: No                     Inhalation: No

**ACUTE TOXICITY**                     Oral: No specific hazard identified.  
Dermal: No specific hazard identified. May cause moderate skin irritation.  
Inhalation: No specific hazard identified.

**OTHER TOXICOLOGICAL INFORMATION**

**Skin Irritation:** Avoid contact with skin. May cause skin irritation.  
**Eye Irritation:** Avoid contact with eyes. May cause moderate eye irritation.  
**Sensitizer:** Is not a sensitizer.

#### 4. FIRST AID MEASURES

**Eye:** 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:** 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.

**Ingestion** Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

**Inhaled** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.

**Note to Physician:** Contains petroleum distillates. Vomiting may cause aspiration pneumonia.

#### 5. FIRE FIGHTING MEASURES

**NFPA Rating:**      **Health: 2**                      **Fire: 2**                      **Reactivity: 0**

**Flammability Class:** Class IIIB (flash point  $\geq$  200°F)

**Flash Point:** 200° F

**Explosive Limits (% of Volume):** Not known

**Extinguishing Media:** CO2, foam, water

**Special Protective Equipment:** Firefighters should wear full protective equipment including self contained breathing apparatus.

**Fire Fighting Procedures:** Normal procedures. Do not allow firefighting water to escape into waterways or sewers.

**Combustion Products:** Oxides of carbon and oxides of sulfur.

**Unusual Fire/Explosion Hazards:** None known

#### 6. ACCIDENTAL RELEASE MEASURES

**Steps to be taken:** Contain spill and do not allow to enter waterways. Soak up with absorbent material and place in a container for disposal.

**Absorbents:** Clay granules, sawdust, dirt, or equivalent.

**Incompatibles:** Strong oxidizers.

#### 7. HANDLING AND STORAGE

**Handling:** Avoid inhalation of vapors and contact with skin, eyes, and clothing. Wash hands, arms and face thoroughly with soap and water after handling product. Do not use this product in or on an electrical portion of equipment due to possibility of shock hazard.

**Storage:** Keep away from children. Store in cool area. Do not contaminate water, food, or feed by storage.

## 8. EXPOSURE CONTROL / PERSONAL MEASURES

**Exposure Limits:** Not established

**Ventilation:** Use with adequate ventilation.

**Personal Protective Equipment:** If prolonged exposure is anticipated, it is recommended for handlers to wear impermeable gloves, goggles and other protective clothing to prevent skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance and Odor:** Straw colored liquid with mild petroleum solvent odor.

**Boiling Point:** Not known

**Melting Point:** Not applicable

**Vapor Pressure (mm Hg):** Not known

**Vapor Density (Air = 1):** Not known

**Specific Gravity:** 0.85

**Bulk Density:** 7.1 lbs/gal

**Solubility:** Emulsifies in water

**Evaporation Rate:** Not known

**pH:** 6.22

## 10. STABILITY AND REACTIVITY

**Stability:** Stable

**Reactivity:** Not reactive

**Incompatibility w/ Other Materials:** Strong Oxidizers

**Decomposition Products:** Carbon oxides, sulfur oxides

**Hazardous Polymerization:** Will not occur

## 11. TOXICOLOGICAL INFORMATION

### **ACUTE TOXICITY**

Acute oral toxicity: LD50 >5100 mg/kg

Acute dermal toxicity: LD50 >2100 mg/kg

Acute inhalation toxicity: 4-Hour LC50 >7.2 mg/L

Skin irritation: Moderate irritant

Eye irritation: Mild irritant

### **SUBCHRONIC TOXICITY [Specific to Active Ingredient(s)]**

In a 90-day subchronic feeding study in rats, the NOEL was 50 mg/kg/day. Changes in body weight and organ weights were observed at higher dose levels. Liver and ovaries were identified as target organs.

No immunotoxic effects were observed in a study in mice when (S)-Hydroprene was fed (diet) at dose levels up to and including 1,200 mg/kg/day, continuously for 30 days.

### **CHRONIC TOXICITY/CARCINOGENICITY [Specific to Active Ingredient(s)]**

A chronic toxicity/carcinogenicity study in rats identified ovaries and the thyroid as target organs. An increased incidence of benign thyroid tumors was present in male rats only at the highest dose tested. Increased weights and macroscopic and microscopic changes in the ovaries were observed at the highest doses. NOEL for males was 1,000 ppm and for females 100 ppm.

### **DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]**

Parental reproductive performance in rats remained unaffected up to a dose level of 7,500 ppm, when evaluated in a 2-generation reproduction/toxicity study. Histologically, all females of 7,500 ppm dose group had cytoplasmic vacuolation in the ovaries, but without affecting reproductive performance. The NOEL for pup development was 1,500 ppm. No teratogenic or fetotoxic effects were observed in rats when pregnant animals were exposed (gavage) to (S)-Hydroprene at levels up to 1,000 mg/kg/day (highest dose tested). NOEL for maternal toxicity was 1,000 mg/kg/day. .

### **MUTAGENICITY [Specific to Active Ingredient(s)]**

(S)-Hydroprene has been found negative for mutagenicity potential. It has tested negative in: 1) Ames Test, 2) in vivo cytogenetic assay, 3) micronucleus test (in vivo) and in 4) test for DNA effects - UDS in rats (in vitro).

## **12. ECOLOGICAL INFORMATION**

### **ENVIRONMENTAL FATE [Active Ingredients Only]**

**Hydrolysis:** Not available

**Photolysis:** Not available

**Soil half life:** Not available

**Water solubility:** <2 ppm, emulsifies in water

### **ECOTOXICITY [Active Ingredients Only]**

**Acute Toxicity:** Fish: Not available;  
Aquatic invertebrates: Not available

## **13. DISPOSAL CONSIDERATIONS**

Do not contaminate water, food, or feed by disposal. **Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of at an approved waste disposal facility. **Container disposal:** Do not reuse empty container. Securely wrap original container in several layers of newspaper and discard in trash.

## **14. TRANSPORT INFORMATION**

**DOT49CFR Description:** Not regulated

**Freight Classification:** Insecticides, other than poison, N.O.I. NMFC-102120

## **15. REGULATORY INFORMATION**

**CERCLA (Superfund):** Not regulated as hazardous

**RCRA:** Not regulated as hazardous

### **SARA 311/312 HAZARD CATEGORIES**

**Immediate Health:** Yes (Irritant)

**Delayed Health:** No

**Fire:** No

**Sudden Pressure:** No

**Reactivity:** No

*The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all inclusive and the manner and conditions of use and handling may involve other or additional considerations.*



# Gentrol®

**IGR Concentrate**  
with Gentrol® Insect Growth Regulator

- CONTROLS COCKROACHES, DRAIN AND FRUIT FLIES, BEDBUGS, AND STORED PRODUCT PEST POPULATIONS
- USE IN FOOD AREAS OF FOOD HANDLING ESTABLISHMENTS
- FOR FOGGING IN FOOD HANDLING ESTABLISHMENTS
- CONTINUOUS PROTECTION FOR 4 MONTHS

## SPECIMEN LABEL

### ACTIVE INGREDIENTS:

(S)-Hydroprene (CAS #65733-18-8

9%

### OTHER INGREDIENTS\*:

91%

Total

100%

\*Contains petroleum distillates

EPA Reg No. 2724-351

KEEP OUT OF REACH OF CHILDREN

### CAUTION

SEE ADDITIONAL PRECAUTIONARY STATEMENTS

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS – CAUTION

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

### FIRST AID

Call a poison control center or doctor immediately for treatment advice.

<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.</li> </ul>
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<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>
	<ul style="list-style-type: none"> <li>• Remove contact lenses, if present, after the first 5 minutes. Then continue rinsing eye.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing..</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> </ul>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-248-7763 for emergency medical treatment information.</p> <p><b>NOTE TO PHYSICIAN:</b> Contains petroleum distillates. Vomiting may cause aspiration pneumonia.</p>	

### PHYSICAL OR CHEMICAL HAZARDS

Do not use this product in or on electrical portions of equipment due to the possibility of shock hazard.

### DIRECTIONS FOR USE

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

### GENERAL INFORMATION

GENTROL®, an Insect Growth Regulator (IGR), is a synthetic, juvenile hormone "look-alike" which disrupts the normal growth development of cockroaches, drain flies, fruit flies, bedbugs, and stored product pests (examples of these pests include Indian meal moths,

rice moths, tobacco moths, red flour beetles, confused flour beetles, lesser grain borers, merchant grain beetles, sawtooth grain beetles, warehouse beetles, cigarette beetles, and Dermestid beetles). Cockroaches and bedbugs exposed to the GENTROL® IGR will become adults incapable of reproducing. GENTROL® also disrupts the normal life cycle of stored product pests, drain and fruit flies, and fleas; thus killing these insects during the pupal stage. In both cases, the cycle of an infestation ends. Use GENTROL® IGR Concentrate (GENTROL®) in apartment buildings, bakeries, bottling facilities, breweries, boiler rooms, cafeterias, candy plants, grocery stores, day care centers, hospitals, residential homes, hotel/motels, office buildings, kitchens, laboratories, cereal processing facilities, manufacturing plants, mausoleums, meat and produce canneries, nursing homes, restaurants, schools, locker rooms, stores, taverns, warehouses, as well as various modes of transportation such as aircraft, buses, trucks, trailers, rail cars, and marine vessels.

Use GENTROL® as a general surface spray, fogging, spot, or crack and crevice application.

Prior to using in commercial or residential (household) food areas, please refer to the Food Handling Establishment Applications section of the label. The preparations prior to treatment and the clean up after application described therein are also to be followed for residential (household) use.

### **INSTRUCTIONS FOR USE**

Mix GENTROL® with diluent and apply with spray or hand application equipment, such as hand-pressurized or power-operated sprayers capable of delivering general surface spray, fogging (space spray/mist), spot, crack and crevice spray applications, or with a paint brush, roller, or similar device.

#### **DILUTION PREPARATION FOR SURFACE SPRAY/PAINT BRUSH, SPOT AND CRACK AND CREVICE PREPARATIONS**

Use 1 ounce of GENTROL® to 1 gallon of diluent. Partially fill the mixing container with diluent, add the GENTROL®, shake or stir, and fill to final volume. Use diluted solution within 48 hours of mixing. Shake or stir before each use. For fogging preparation follow equipment manufacturer's instructions.

#### **TANK MIXING**

GENTROL® may be tank mixed with an adulticide currently registered for use, unless the product label prohibits such use. Use the resulting tank mixture in accordance with the more restrictive label limitations and precautions.

#### **GENERAL SURFACE APPLICATION**

Apply the GENTROL® dilution at a rate of 1 gallon per 1500 sq ft of surface area. Use spray/application equipment capable of delivering a variable spray or coating to uniformly apply the solution. Apply to areas such as walls, floors, ceilings, attics, basements, or

crawlspaces. NOTE: Prior to treating around air ducts, shut off ventilation system. Allow treatment to dry prior to turning on ventilation system.

#### **FOGGING (SPACE SPRAY/MIST) APPLICATION**

Apply GENTROL® as a fog or an ultra-low volume (ULV) mist with equipment such as ULV, mechanical misting sprayers, aerosol generators, or thermal foggers to achieve uniform coverage. Follow equipment manufacturer's instructions. Apply at a rate of 1 ounce GENTROL® per 12,000 cu ft. GENTROL® may be tank mixed with adulticides labeled for fogging. Follow the directions of the more restrictive label when tank mixing. Use water or oil as a diluent, depending on the type of equipment used. Fogging applications are best for larger facilities including warehouses (Refer to Warehouses section below). Close room or warehouse and shut off all ventilation systems. Apply the product in the air and direct mist toward all areas that may harbor target pests. After treatment, leave the room closed for 30 minutes or longer as recommended by the equipment manufacturer or the labels of other products applied in tank mixing. Do not remain in treated area; ventilate before reentry.

#### **SPOT AND CRACK AND CREVICE APPLICATIONS**

Apply GENTROL® diluted spray solution using either a pressurized spray system capable of delivering a pinpoint or variable spray pattern or a device capable of coating evenly. Make crack and crevice applications directly to areas such as crevices, baseboards, floors, ceilings, or walls. Make spot treatments to areas such as storage areas, closets, around water pipes, doors, windows, and behind and under appliances/equipment, furniture and beds.

To treat bedbugs, apply to harborage points mentioned above; in addition, under beds, bottom side of box springs (do not treat linens and mattresses), under and behind night stands, to points where carpet and wall meet, cracks in cove base, molding, and other areas where bedbugs harborage. Retreat at 14 days for heavy infestations.

#### **WAREHOUSES (Non-Food)**

Apply GENTROL® as a general surface, fogging, spot, or crack and crevice treatment in non-food storage warehouses. Apply to all areas that may harbor pests, including under and between pallets.

#### **FOOD HANDLING ESTABLISHMENT APPLICATIONS**

Apply GENTROL® as a general surface, fogging, spot, or crack and crevice treatment in both food and non-food areas of Food Handling Establishments. These establishments are defined as places other than private residences where exposed food is held, prepared, processed, or served. It also includes areas where food items are received, prepared, packaged, and stored, as well as enclosed food processing systems (mills, dairies, etc).

#### **SPOT AND CRACK AND CREVICE APPLICATIONS**

Prior to application, remove or cover all food items in area to be treated. Do not apply directly to food or food-handling surfaces.

### **FOR CONTROL OF DRAIN FLIES, FRUIT FLIES**

Apply GENTROL® to areas of fly breeding. For drains, apply product into and around the downspout and catch basin area. Coat these areas thoroughly as fly larvae develop in the scum buildup on the sides of drain pipes. Repeat applications at 2 to 4 week intervals depending upon the severity of infestation.

### **ALTERNATE DIRECTIONS FOR FOAM APPLICATION**

Refer to the Dilution Preparation section of this label for appropriate dilution rate for GENTROL®. To convert GENTROL® dilution to a foam, add foaming agent at manufacturer's rate. For best results, use the higher amount of the foaming agent rate range. Follow the requirements of the foam equipment manufacturer.

### **SURFACE SPRAY APPLICATION**

#### **DO NOT APPLY DIRECTLY TO FOOD PRODUCTS GENERAL AREA TREATMENTS**

Prior to application, remove or cover all food items. Also, cover all food contact surfaces (i.e., equipment, benches, shelves - areas where exposed food may be handled, held, prepared, processed, or served). If left uncovered, these areas must be thoroughly cleaned by a method capable of removing chemical residues after treatment.

### **PARTIAL AREA TREATMENTS**

GENTROL® can be applied to partial areas of food handling establishments in cases of small or localized infestations. For partial area treatments, a perimeter of at least 6 feet must be established (6 feet in all directions from the treated area), where all food handling surfaces are either covered at the time of treatment, or thoroughly cleaned by a method effective in removing chemical residues after treatment.

### **PANTRY/CABINETS, SMALL FOOD STORAGE AREAS**

Apply as a surface spray, crack and crevice spray, or

spot treatment to pantry and cupboard shelves or other areas where food is stored. Prior to spraying, remove all food containers and foodstuffs. Do not replace food containers or foodstuffs until spray has dried. Do not store food in open containers in treated pantries. Destroy any infested food packages to ensure proper control.

### **FOGGING (SPACE SPRAY/MIST) APPLICATION**

Prior to application, remove or cover all food items. Also, cover all food contact surfaces (i.e.; equipment, benches, shelves - areas where exposed food may be handled, held, prepared, processed, or served). If left uncovered, these areas must be thoroughly cleaned by a method capable of removing chemical residues after treatment.

### **WAREHOUSES (Food)**

Apply GENTROL® as a general surface, fogging, spot, or crack and crevice treatment in warehouses where packaged food items are stored in such a way that direct contact with the foodstuff is not anticipated.

### **STORAGE AND DISPOSAL**

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

#### **STORAGE**

Store in a cool area away from children.

#### **PESTICIDE DISPOSAL**

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### **CONTAINER DISPOSAL**

Do not reuse empty container. Securely wrap original container in several layers of newspaper and discard in trash.

### **WARRANTY**

Seller makes no warranty, expressed or implied, concerning the use and handling of this product other than indicated on the label. Buyer assumes all risks of use and handling of this material when such use and handling are contrary to label instructions.

For information, call **1-800-248-7763** or visit our Web site: **[www.zoecon.com](http://www.zoecon.com)**