Safety Data Sheet

Section 1: Identification

Product identifier

Product Name: Zoecon Gentrol IGR Concentrate
Synonyms: 37860A; 37880A; EPA Reg. No.: 2724-351; Zoecon RF-259 Emulsifiable Concentrate
Product Description: Straw-colored liquid.

Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Insect growth regulator
Restrictions on use: KEEP OUT OF THE REACH OF CHILDREN. Avoid inhalation of vapors or fumes. Use in well ventilated area. Avoid contact with eyes, skin or clothing. Do not take internally.

Details of the supplier of the safety data sheet

Manufacturer: Wellmark International
1501 E. Woodfield Road, Suite 200W
Schaumburg, IL 60173
United States
www.zoecon.com

Emergency telephone number

Manufacturer: 1-800-248-7763
Manufacturer (Transportation): 1-800-424-9300 - CHEMTREC
Manufacturer (Transportation): 1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted

Section 2: Hazard Identification

United States (US)
According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012: Carcinogenicity 2
Skin Irritation 2
Aspiration 1
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects

Label elements

OSHA HCS 2012

DANGER
Hazard statements • Suspected of causing cancer.
Causes skin irritation
May be fatal if swallowed and enters airways
May cause drowsiness or dizziness

Precautionary statements
Prevention • Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use only outdoors or in a well-ventilated area.
Do not breathe dust, fume, gas, mist, vapors and/or spray.
Response • IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor if you feel unwell.
IF exposed or concerned: Get medical advice/attention.

Storage/Disposal • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.

Other hazards

Section 3 - Composition/Information on Ingredients

Substances

Mixtures

- Material does not meet the criteria of a substance.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(S)-Hydroprene</td>
<td>CAS:65733-18-8</td>
<td>9%</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>CAS:64742-47-8</td>
<td>59.12%</td>
</tr>
<tr>
<td>Solvent naphtha</td>
<td>CAS:64742-94-5</td>
<td>0.92% TO 1.85%</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>CAS:91-20-3</td>
<td>0.1% TO 0.28%</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>NDA</td>
<td>&gt; 30%</td>
</tr>
</tbody>
</table>

Section 4: First-Aid Measures

Description of first aid measures

Inhalation • IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or doctor if you feel unwell.

Skin • IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.

Eye • IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,
if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Ingestion**
- IF SWALLOWED: Aspiration hazard - do NOT induce vomiting. Get medical attention immediately.

**Most important symptoms and effects, both acute and delayed**
- Aspiration hazard, suspected of causing cancer, causes skin irritation, may cause dizziness or drowsiness if inhaled. Refer to Section 11 - Toxicological Information.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician**
- Contains petroleum distillate vomiting may cause aspiration pneumonia. Treat symptomatically and supportively.

### Section 5: Fire-Fighting Measures

**Extinguishing media**

**Suitable Extinguishing Media**
- LARGE FIRE: Water spray, fog or regular foam.
- SMALL FIRES: Dry chemical, CO2, water spray or regular foam.

**Unsuitable Extinguishing Media**
- Avoid heavy hose streams.

**Firefighting Procedures**
- Do not allow fire fighting water to escape into waterways or sewers. LARGE FIRES: Move containers from fire area if you can do it without risk. Stay upwind. Ventilate closed spaces before entering. Do not breathe gas/fumes/vapor/spray. Keep unauthorized personnel away.

**Special hazards arising from the substance or mixture**

**Unusual Fire and Explosion Hazards**
- No data available.

**Hazardous Combustion Products**
- No data available.

**Advice for firefighters**
- Wear positive pressure self-contained breathing apparatus (SCBA).

### Section 6 - Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions**
- Do not walk through spilled material. Ventilate enclosed areas. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing fumes.

**Emergency Procedures**

**Environmental precautions**
- LARGE SPILLS: Prevent entry into waterways, sewers, basements or confined areas.

**Methods and material for containment and cleaning up**

**Containment/Clean-up Measures**
- Absorb spills with an inert material, clay granules or other inert absorbent material and put in container for disposal. Stop leak if you can do it without risk. Use appropriate Personal Protective Equipment (PPE).

### Section 7 - Handling and Storage

**Precautions for safe handling**

**Handling**
- Keep away from fire - No Smoking. Avoid breathing fumes. Use only in well ventilated areas. Wear appropriate personal protective equipment, avoid direct contact. Avoid contact with skin or eyes. Do not use this product in or on electrical portions of equipment due to the possibility of shock hazard.
Conditions for safe storage, including any incompatibilities

Storage
- Store locked up. Store in a cool/low-temperature, well-ventilated dry place away from heat and ignition sources. Keep from freezing. Keep container tightly closed.

Other Information
- See product label for additional information.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines
- No data available.

<table>
<thead>
<tr>
<th></th>
<th>Exposure Limits/Guidelines</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene (91-20-3)</td>
<td>TWAs: 10 ppm TWA</td>
<td>10 ppm TWA; 50 mg/m3 TWA</td>
<td>10 ppm TWA; 50 mg/m3 TWA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STELs: Not established</td>
<td>15 ppm STEL; 75 mg/m3 STEL</td>
<td>Not established</td>
<td></td>
</tr>
</tbody>
</table>

Exposure Limits Supplemental
ACGIH
* Naphthalene (91-20-3): TLV Basis - Critical Effects: (cataracts; upper respiratory tract irritation; hemolytic anemia)

Exposure controls

Engineering Measures/Controls
- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Personal Protective Equipment

Pictograms

- [Respiratory]
- [Eye/Face]
- [Hands]
- [Skin/Body]

Environmental Exposure Controls
- Refer to Section 13 - Disposal Considerations.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Physical Form</th>
<th>Appearance/Description</th>
<th>Straw-colored liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Color</td>
<td>Odor</td>
<td>Weak, neutral, paint-like.</td>
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<tr>
<td></td>
<td>Odor Threshold</td>
<td>No data available</td>
<td>No data available</td>
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</tbody>
</table>

General Properties

<table>
<thead>
<tr>
<th></th>
<th>Boiling Point</th>
<th>Melting Point/Freezing Point</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Decomposition Temperature</td>
<td>pH</td>
<td>7.29</td>
</tr>
<tr>
<td></td>
<td>Specific Gravity/Relative Density</td>
<td>Water Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td></td>
<td>Viscosity</td>
<td>Critical Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td></td>
<td>Volatility</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Preparation Date: 07/September/2015
Revision Date: 07/September/2015
Format: GHS Language: English (US)
OSHA HCS 2012
Section 10: Stability and Reactivity

Reactivity

• Non-reactive under normal handling and storage conditions.

Chemical stability

• Stable

Possibility of hazardous reactions

• Hazardous polymerization will not occur.

Conditions to avoid

• Excessive heat >110°F. Keep away from fire.

Incompatible materials

• Strong oxidizers.

Hazardous decomposition products

• Thermal decomposition may produce toxic gases.

Section 11 - Toxicological Information

Information on toxicological effects

<table>
<thead>
<tr>
<th>CAS</th>
<th>Acute Toxicity: Ingestion/Oral-Rat LD50 • &gt;5100 mg/kg; Inhalation-Rat LC50 • &gt;7.2 mg/L 4 Hour (s); Skin-Rabbit LD50 • &gt;2100 mg/kg; Irritation: Eye-Rabbit • Mild irritation; Skin-Rabbit • Moderate irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDA</td>
<td>Zoecon Gentrol IGR Concentrate</td>
</tr>
</tbody>
</table>

GHS Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory sensitization</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Serious eye damage/Irritation</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Acute toxicity</td>
<td>OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral - Classification criteria not met</td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>OSHA HCS 2012 • Aspiration 1</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>OSHA HCS 2012 • Carcinogenicity 2</td>
</tr>
<tr>
<td>Skin corrosion/Irritation</td>
<td>OSHA HCS 2012 • Skin Irritation 2</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>STOT-RE</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
</tbody>
</table>
Potential Health Effects

Inhalation
- **Acute (Immediate)**: May affect the central nervous system. Symptoms may include dizziness or drowsiness.
- **Chronic (Delayed)**: No data available

Skin
- **Acute (Immediate)**: Causes skin irritation.
- **Chronic (Delayed)**: No data available

Eye
- **Acute (Immediate)**: May cause mild irritation.
- **Chronic (Delayed)**: No data available

Ingestion
- **Acute (Immediate)**: Aspiration hazard - small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.
- **Chronic (Delayed)**: CHRONIC TOXICITY/CARCINOGENICITY (S) - Hydroprene: 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.

Mutagenic Effects
- MUTAGENICITY: (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).

Carcinogenic Effects
- Naphthalene is listed as a suspected human carcinogen by IARC. (S) - Hydroprene is not a carcinogen.

Reproductive Effects
- DEVELOPMENTAL AND REPRODUCTIVE TOXICITY (S) - Hydroprene: 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.

Section 12 - Ecological Information

**Toxicity**

<table>
<thead>
<tr>
<th>Components</th>
<th>65733-18-8</th>
<th>Aquatic Toxicity - Fish: 96 Hour(s) NOEC Rainbow trout &gt;0.43 mg/L [Acute]</th>
</tr>
</thead>
<tbody>
<tr>
<td>(S)-Hydroprene (9%)</td>
<td>64742-47-8</td>
<td>Aquatic Toxicity - Fish: 96 Hour(s) LC50 Rainbow Trout 2.9 mg/L [Acute] 96 Hour(s) LC50 Lepomis macrochirus 2.2 mg/L [Acute]</td>
</tr>
</tbody>
</table>

**Persistence and degradability**
- No data available.

**Bioaccumulative potential**
- No data available.

**Mobility in Soil**
- No data available.
Other adverse effects  
• No data available.

Potential Environmental Effects  
• No data available.

### Section 13 - Disposal Considerations

**Waste treatment methods**

**Product waste**  
• Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**Packaging waste**  
• Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

### Section 14 - Transport Information

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN proper shipping name</th>
<th>Transport hazard class (es)</th>
<th>Packing group</th>
<th>Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Reportable Quantity Naphthalene = 100 lbs.</td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

**Special precautions for user**  
• None specified.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**  
• No data available

**Other information**

**DOT**  
Environmental Hazards: RQ (Naphthalene = 100 lb).

**IMO/IMDG**  
• No data available

**IATA/ICAO**  
• No data available

### Section 15 - Regulatory Information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**SARA Hazard Classifications**  
• Acute, SARA Title III Section 313

**FIFRA – Pesticide Labeling**

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

**CAUTION**

**Precautionary Statements**

**Hazards to Humans and Domestic Animals**

• KEEP OUT OF THE REACH OF CHILDREN.

• 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. If swallowed • 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. If in eyes • 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. If in eyes or clothing • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • If 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.

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

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
<td>Yes</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>Yes</td>
</tr>
<tr>
<td>Solvent naphtha</td>
<td>64742-94-5</td>
<td>Yes</td>
</tr>
<tr>
<td>(S)-Hydroprene</td>
<td>65733-18-8</td>
<td>No</td>
</tr>
</tbody>
</table>

United States

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants
• Naphthalene 91-20-3
• Solvent naphtha 64742-94-5 Not Listed
• Distillates (petroleum), hydrotreated light 64742-47-8 Not Listed
• (S)-Hydroprene 65733-18-8 Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities
• Naphthalene 91-20-3 100 lb final RQ; 45.4 kg final RQ
• Solvent naphtha 64742-94-5 Not Listed
• Distillates (petroleum), hydrotreated light 64742-47-8 Not Listed
• (S)-Hydroprene 65733-18-8 Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting
• Naphthalene 91-20-3 0.1 % de minimis concentration
• Solvent naphtha 64742-94-5 Not Listed
• Distillates (petroleum), hydrotreated light 64742-47-8 Not Listed
• (S)-Hydroprene 65733-18-8 Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII
• Naphthalene 91-20-3 Included in waste streams: F024, F025, F034, F039, K001, K035, K060, K087, K145
• Solvent naphtha 64742-94-5 Not Listed
• Distillates (petroleum), hydrotreated light 64742-47-8 Not Listed
• (S)-Hydroprene 65733-18-8 Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261
• Naphthalene 91-20-3 waste number U165
• Solvent naphtha 64742-94-5 Not Listed
• Distillates (petroleum), hydrotreated light 64742-47-8 Not Listed
• (S)-Hydroprene 65733-18-8 Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents
• Naphthalene 91-20-3
• Solvent naphtha 64742-94-5 Not Listed
• Distillates (petroleum), hydrotreated light 64742-47-8 Not Listed
• (S)-Hydroprene 65733-18-8 Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards
• Naphthalene 91-20-3 0.059 mg/L (wastewater); 5.6 mg/kg (nonwastewater)
• Solvent naphtha 64742-94-5 Not Listed
• Distillates (petroleum), hydrotreated light 64742-47-8 Not Listed
• (S)-Hydroprene 65733-18-8 Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water Monitoring
• Naphthalene 91-20-3
• Solvent naphtha 64742-94-5 Not Listed
• Distillates (petroleum), hydrotreated light 64742-47-8 Not Listed
• (S)-Hydroprene 65733-18-8 Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely Toxic Wastes & Other Hazardous Characteristics
• Naphthalene 91-20-3 waste number U165
• Solvent naphtha 64742-94-5 Not Listed
• Distillates (petroleum), hydrotreated light 64742-47-8 Not Listed
• (S)-Hydroprene 65733-18-8 Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Waste Minimization Priority Chemicals
• Naphthalene 91-20-3
• Solvent naphtha 64742-94-5 Not Listed
• Distillates (petroleum), hydrotreated light 64742-47-8 Not Listed
• (S)-Hydroprene 65733-18-8 Not Listed

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**Section 16 - Other Information**

**Revision Date**
• 07/September/2015

**Last Revision Date**
• 07/September/2015

**Preparation Date**
• 07/September/2015

**Disclaimer/Statement of Liability**
• The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.