**Section 1: Identification**

**Product identifier**

**Product Name**
- Zoecon Precor IGR Concentrate

**Synonyms**
- 10290A; 37190B; 37740C; EPA Reg. No.: 2724-352; Zoecon RF-291 Emulsifiable Concentrate

**Product Description**
- Very light straw-colored, transparent 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 contact with eyes, skin and clothing. Do not use or store near heat or open flame. Do not take internally. Avoid inhalation of vapors or fumes.

**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

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**Section 2: Hazard Identification**

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

**Classification of the substance or mixture**

**OSHA HCS 2012**
- Aspiration 1
- Flammable Liquids 4
- Eye Mild Irritation 2B
- Skin Irritation 2
- Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects

**Label elements**

**OSHA HCS 2012**

**DANGER**
Hazard statements

- Causes skin irritation
- May be fatal if swallowed and enters airways
- Combustible liquid
- Causes eye irritation
- May cause drowsiness or dizziness

Precautionary statements

Prevention
- Wash thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Avoid breathing dust, fume, gas, mist, vapors and/or spray.
- Use only outdoors or in a well-ventilated area.
- Keep away from flames and hot surfaces. - No smoking.

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.
- In case of fire: Use appropriate media Foam, water, dry chemical or CO2 for extinction.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor if you feel unwell.
- 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.

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

Other hazards

OSHA HCS 2012

Section 3 - Composition/Information on Ingredients

Substances
- Material does not meet the criteria of a substance.

Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(s)-Methoprene</td>
<td>CAS:65733-16-6</td>
<td>1.2%</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>CAS:64742-47-8</td>
<td>78.72%</td>
</tr>
<tr>
<td>Poly(oxy-1,2-ethanediyl), alpha-(dodecylphenyl)-omega-hydroxy-</td>
<td>CAS:9014-92-0</td>
<td>&lt;= 16.6%</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>NDA</td>
<td>&gt; 3%</td>
</tr>
</tbody>
</table>
Section 4: First-Aid Measures

Description of first aid measures

Inhalation
- IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin
- 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.

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: Immediately call a poison control center or doctor. Aspiration hazard - if swallowed, do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed
- Aspiration hazard, causes skin irritation, causes eye 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
- 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.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- Combustible liquid. Containers may explode when heated. Liquid will float and may re-ignite on surface of water.

Hazardous Combustion Products
- Combustible liquid - may produce carbon dioxide and/or carbon monoxide.

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.

Emergency Procedures
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ventilate closed spaces before entering. Avoid release into the environment.

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

Methods and material for containment and cleaning up
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.

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. Do not store at temperatures exceeding 130°F. Keep container tightly closed.

Incompatible Materials or Ignition Sources
- Heat, sparks, open flame.

Other Information
- See product label for additional information.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines
- No data available.

Exposure controls

Engineering Measures/Controls
- Use adequate ventilation to remove vapors (fumes, dust, etc.)

Personal Protective Equipment

Pictograms

Respiratory
- In case of inadequate ventilation, avoid breathing vapors or mist, wear a NIOSH approved chemical cartridge respirator with organic vapor cartridges and a pesticide pre-filter.

Eye/Face
- Wear chemical splash safety goggles.

Hands
- Wear appropriate gloves.

Skin/Body
- If prolonged exposure is anticipated, it is recommended for handlers to wear appropriate clothing to prevent skin contact.

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

Other Information
- See product label for additional information.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Physical Form</th>
<th>Color</th>
<th>Appearance/Description</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Form</td>
<td>Liquid</td>
<td>Very light straw, transparent.</td>
<td>Very light straw, transparent liquid.</td>
<td>Faint aliphatic.</td>
</tr>
</tbody>
</table>
### 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
- Direct sunlight. Do not freeze. Excessive heat >130°F. Heat, sparks, open flame, other ignition sources, and oxidizing conditions. Strong oxidizers.

#### Incompatible materials
- Store away from oxidizers.

#### Hazardous decomposition products
- Carbon dioxide and possibly carbon monoxide.

### Section 11 - Toxicological Information

#### Information on toxicological effects

<table>
<thead>
<tr>
<th>CAS</th>
<th><strong>Acute Toxicity</strong>: Ingestion/Oral-Rat LD50 • &gt;5100 mg/kg; Inhalation-Rat LC50 • 5.37 mg/L 4 Hour (s); Skin-Rabbit LD50 • &gt;2100 mg/kg; <strong>Irritation</strong>: Eye-Rabbit • Mild irritation; Skin-Rabbit • Moderate irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDA</td>
<td><strong>OSHA HCS 2012</strong> • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral -</td>
</tr>
</tbody>
</table>

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**Odor Threshold**: No data available

**General Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>0.82 (6.8 lb/gal)</td>
</tr>
<tr>
<td>Viscosity</td>
<td>&lt; 100 Centipoise (cPs, cP) or mPas</td>
</tr>
<tr>
<td>pH</td>
<td>4.92 (10% in Type 1 Water)</td>
</tr>
</tbody>
</table>

**Volutility**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Flammability**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>196°F (91°C)</td>
</tr>
<tr>
<td>UEL</td>
<td>No data available</td>
</tr>
<tr>
<td>LEL</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Environmental**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octanol/Water Partition coefficient</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Classification criteria not met

<table>
<thead>
<tr>
<th>Category</th>
<th>Classification criteria not met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspiration Hazard</td>
<td>OSHA HCS 2012 • Aspiration 1</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>OSHA HCS 2012 • Classification criteria not met</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>
<tr>
<td>STOT-SE</td>
<td>OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects</td>
</tr>
<tr>
<td>Toxicity for Reproduction</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<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 • Eye Mild Irritation 2B</td>
</tr>
</tbody>
</table>

Potential Health Effects

Inhalation
- **Acute (Immediate)**: May cause drowsiness and dizziness.
- **Chronic (Delayed)**: No data available

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

Eye
- **Acute (Immediate)**: Causes eye 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)**: No data available

Section 12 - Ecological Information

Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>Data</th>
</tr>
</thead>
</table>
| (s)-Methoprene (1.2%)| 65733-16-6| **Crustacea**: NOEC Crustacea *Mysis shrimp* 0.014 mg/L [Chronic]; 96 Hour(s) LC50 Crustacea *Mysis shrimp* 0.11 mg/L [Acute]; 48 Hour(s) LC50 Crustacea *Daphnia magna* 0.36 mg/L [Acute];  
|                      |         | **Fish**: 96 Hour(s) LC50 Fish *Rainbow Trout* 0.76 mg/L [Acute]; 96 Hour(s) LC50 Fish *Blue Gill* >0.37 mg/L [Acute]; NOEC Fish *Fathead minnow* 0.048 mg/L [Chronic] |

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. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Never place unused product down any indoor or outdoor drain.

Packaging waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. See product label for disposal instructions.

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>Petroleum distillates, n.o.s.</td>
<td>3</td>
<td>III</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>Petroleum distillates, n.o.s.</td>
<td>3</td>
<td>III</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>Petroleum distillates, n.o.s.</td>
<td>3</td>
<td>III</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
- IMO/IMDG - No data available
- IATA/ICAO - No data available

Key to abbreviations
N/A = Not applicable.

Section 15 - Regulatory Information

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

SARA Hazard Classifications
- Acute

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
- HAZARDS TO HUMANS AND DOMESTIC ANIMALS -CAUTION: Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

First Aid
- Call a poison control center or doctor immediately for treatment advice. 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 on
**Physical or Chemical Hazards**

- Skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.
- NOTE TO PHYSICIAN: This product contains petroleum distillates. If swallowed: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
- Combustible. Do not use or store near heat or open flame.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>(s)-Methoprene</td>
<td>65733-16-6</td>
<td>No</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
<td>Yes</td>
</tr>
<tr>
<td>Poly(oxy-1,2-ethanediyl), alpha-(dodecylphenyl)-omega-hydroxy-</td>
<td>9014-92-0</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Section 16 - Other Information**

- **Last Revision Date**: 20/July/2015
- **Preparation Date**: 20/July/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.