Section 1: Identification

Product identifier

Product Name: Zenivex E20
Synonyms: 100502020; 100502022; 100502023; 100503887; 100511617; EPA Reg. No.: 2724-791; RF 2056 OL
Product Description: Clear to pale yellow liquid.

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

Recommended use: Insecticide.
Restrictions on use: Avoid contact with eyes, skin or clothing. Avoid release to the environment. Avoid inhalation of vapors or fumes. KEEP OUT OF THE REACH OF CHILDREN.

Details of the supplier of the safety data sheet

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

Emergency telephone number

Manufacturer (Transportation): 1-800-424-9300 - CHEMTREC
Manufacturer (Transportation): 1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted
Manufacturer: 1-888-914-2082

Section 2: Hazard Identification

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

Classification of the substance or mixture

OSHA HCS 2012: Eye Mild Irritation 2B

Label elements

OSHA HCS 2012: WARNING

Hazard statements: Causes eye irritation

Precautionary statements

Prevention: Wash thoroughly after handling.
Response: 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.
Other hazards
OSHA HCS 2012

- This product is toxic to aquatic organisms, including fish and invertebrates. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

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>Etofenprox</td>
<td>CAS:80844-07-1</td>
<td>20%</td>
</tr>
<tr>
<td>Isopropyl myristate</td>
<td>CAS:110-27-0</td>
<td>79.38%</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>NDA</td>
<td>0.62%</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 control center or doctor for further treatment advice.

Skin
- IF ON SKIN: Wash skin with soap and water. 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: call a poison center or doctor if you feel unwell. Rinse mouth. Have person drink pint of lukewarm water if able to swallow. Do NOT induce vomiting; Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed
- Causes eye irritation. Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
- Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media
- Use water, foam, carbon dioxide, or dry chemical.

Unsuitable Extinguishing Media
- Avoid heavy hose streams.
Firefighting Procedures
- Keep unauthorized personnel away.
  LARGE FIRES: Dike fire control water for later disposal; do not scatter the material.
  Stay upwind.
  Ventilate closed spaces before entering.

Special hazards arising from the substance or mixture
Unusual Fire and Explosion Hazards
- None known.
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
- Avoid contact with skin, eyes, and clothing. Remove clothing and wash thoroughly after use. Use appropriate Personal Protective Equipment (PPE). Do not walk through spilled material. Ensure adequate ventilation to remove vapors, fumes, dust etc.
Emergency Procedures
- Use normal clean up procedures.

Environmental precautions
- Contain and prevent from release into any waterway, sewer or drain.

Methods and material for containment and cleaning up
Containment/Clean-up Measures
- LARGE SPILLS: Dike far ahead of spill for later disposal.
  SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

Section 7 - Handling and Storage

Precautions for safe handling
Handling
- Wash hands thoroughly with soap and water after handling. Read label before use. Avoid contact with skin or eyes.

Conditions for safe storage, including any incompatibilities
Storage
- Keep from freezing. Keep only in the original container.
Incompatible Materials or Ignition Sources
- No data available.

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)
Pictograms

Respiratory
- In case of insufficient ventilation, use NIOSH approved respiratory protection.

Eye/Face
- Wear safety glasses.

Hands
- Wear appropriate gloves.

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

General Industrial Hygiene Considerations

Environmental Exposure Controls
- Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.
- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Appearance/Description</th>
<th>Physical Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Clear to pale yellow.</td>
<td>Color</td>
<td>Clear to pale yellow.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
<td>Odor</td>
<td>Mild</td>
</tr>
</tbody>
</table>

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>0.93</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Insoluble</td>
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<tr>
<td>pH</td>
<td>No data available</td>
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<tr>
<td>Specific Gravity</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
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</table>

Volatility

<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>
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</table>

Flammability

<table>
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<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>135ºC (275ºF)</td>
</tr>
<tr>
<td>UEL</td>
<td>No data available</td>
</tr>
<tr>
<td>LEL</td>
<td>No data available</td>
</tr>
<tr>
<td>Flame Duration</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Flammable.</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>

Section 10: Stability and Reactivity

Reactivity
- No dangerous reaction known under conditions of normal use.

Chemical stability
- Stable

Possibility of hazardous reactions
- Hazardous polymerization will not occur.

Conditions to avoid
- Extreme temperatures. Keep away from fire.
Incompatible materials

- Strong oxidizing agents.

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;5000 mg/kg; Inhalation-Rat LC50 • &gt;2.05 mg/L; Skin-Rat LD50 • &gt;5000 mg/kg; Irritation: Eye-Rabbit • Mild irritation; Skin-Rabbit • Mild irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zenivex E20</td>
<td>NDA</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>GHS Properties</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<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 • Classification criteria not met</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 • Not classified - data lacking</td>
</tr>
<tr>
<td>Skin corrosion/Irritation</td>
<td>OSHA HCS 2012 • Classification criteria not met</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 • Classification criteria not met</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>

#### Route(s) of entry/exposure

- Inhalation, Ingestion, Eyes, and Skin

#### Potential Health Effects

**Inhalation**

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

**Skin**

- **Acute (Immediate)**: May cause mild irritation.
- **Chronic (Delayed)**: Repeated exposure to etofenprox can cause skin irritation.

**Eye**

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

**Ingestion**

- **Acute (Immediate)**: Under normal conditions of use, no health effects are expected.
- **Chronic (Delayed)**: No data available.
Section 12 - Ecological Information

Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Etofenprox (20%)</td>
<td>80844-07-1</td>
<td><strong>Crustacea:</strong> 96 Hour(s) LC50 <strong>Mysid shrimp</strong> 0.0000188 mg/L; 48 Hour(s) LC50 <strong>Water Flea Daphnia magna</strong> 0.0008 mg/L; <strong>NOEC Water Flea Daphnia magna</strong> 0.00017 mg/L; <strong>Fish:</strong> 96 Hour(s) LC50 <strong>Sheepshead minnow</strong> &gt;0.0165 mg/L; 96 Hour(s) LC50 <strong>Rainbow Trout</strong> 0.0027 mg/L</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 studies have been found.

Potential Environmental Effects

- This product is toxic to aquatic organisms, including fish and invertebrates. This product is highly toxic to bees exposed to direct treatment. Care should be taken to avoid contamination of the environment.

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 UN3082</td>
<td>Environmentally hazardous substance, liquid, n.o.s (Etofenprox)</td>
<td>9</td>
<td>III</td>
<td>N/A</td>
</tr>
<tr>
<td>IMO/IMDG UN3082</td>
<td>Environmentally hazardous substance, liquid, n.o.s (Etofenprox)</td>
<td>9</td>
<td>III</td>
<td>Marine Pollutant</td>
</tr>
<tr>
<td>IATA/ICAO UN3082</td>
<td>Environmentally hazardous substance, liquid, n.o.s (Etofenprox)</td>
<td>9</td>
<td>III</td>
<td>Acute Aquatic Toxicity</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

- Not relevant.

Other information

IMO/IMDG • No data available

IATA/ICAO • No data available

Key to abbreviations
Section 15 - Regulatory Information

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

SARA Hazard Classifications  •  Acute

FIFRA – Pesticide Labeling

This material 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

Keep out of reach of children.

Hazards to Humans and Domestic Animals

HAZARDS TO HUMANS & DOMESTIC ANIMALS - CAUTION Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Applicators and other handlers must wear long-sleeved shirt, long pants, socks and shoes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and launder before reuse. Repeated exposure to etofenprox can cause skin irritation.

First Aid

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 eyes. • Call a poison control center or doctor for treatment advice. Note to Physician: May pose an aspiration pneumonia hazard. Contains petroleum distillate.

Environmental Hazards

ENVIRONMENTAL HAZARDS This pesticide is toxic to aquatic organisms, including fish and aquatic invertebrates. Runoff from treated areas or deposition into bodies of water may be hazardous to fish and other aquatic organisms. Do not apply over bodies of water (lakes, rivers, permanent streams, natural ponds, commercial fish ponds, swamps, marshes or estuaries), except when necessary to target areas where adult mosquitoes are present, and weather conditions will facilitate movement of applied material away from water in order to minimize incidental deposition into the water body. Do not contaminate bodies of water when disposing of equipment rinsate or washwaters. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Time applications to provide the maximum possible interval between treatment and the next period of bee activity. Do not apply to blooming crops or weeds when bees are visiting the treatment area, except when applications are made to prevent or control a threat to public and/or animal health determined by a state, tribal, or local health or vector control agency on the basis of documented evidence of disease-causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

Physical or Chemical Hazards

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>Etofenprox</td>
<td>80844-07-1</td>
<td>No</td>
</tr>
<tr>
<td>Isopropyl myristate</td>
<td>110-27-0</td>
<td>Yes</td>
</tr>
</tbody>
</table>
## Section 16 - Other Information

<table>
<thead>
<tr>
<th>Last Revision Date</th>
<th>17/June/2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation Date</td>
<td>17/June/2015</td>
</tr>
<tr>
<td>Disclaimer/Statement of Liability</td>
<td>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.</td>
</tr>
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Preparation Date: 17/June/2015
Revision Date: 17/June/2015
Format: GHS Language: English (US)
OSHA HCS 2012
Page 8 of 8