1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Onslaught® Microencapsulated Insecticide

**PRODUCT DESCRIPTION:** A Microencapsulated Insecticide.

**PRODUCT CODE:** 28371, EPA REG. NO.: 1021-1815

**ACTIVE INGREDIENT(S):** Esfenvalerate

**MANUFACTURER**
McLaughlin Gormley King Company
8810 10th Avenue North
Minneapolis, MN 55427

**Emergency Contact:** SafetyCall®
**Emergency Phone:** 1(888) 740-8712
**Alternate Emergency Phone:** 1(952) 852-9509

**Product Stewardship:** 1(800) 645-6466
**E-Mail:** mgk-sds@mgk.com

**24 HR. EMERGENCY TELEPHONE NUMBERS**

**FOR TRANSPORTATION:**
CHEMTREC® U.S. and CANADA: 1(800) 424-9300
CHEMTREC® All Other Areas: 1(703) 527-3887

**COMMENTS:** MGK® Hours of operation are 8:00 am to 4:30 pm CST, 14:00 to 22:30 GMT.

For MEDICAL EMERGENCIES or PESTICIDE INCIDENTS, call 24 hours a day to 1-888-740-8712.

2. HAZARDS IDENTIFICATION

**GHS CLASSIFICATIONS**

**Health:**
- Eye Irritation, Category 2B
- Acute Toxicity (Inhalation), Category 4
- Acute Toxicity (Oral), Category 5

**Environmental:**
- Acute Hazards to the Aquatic Environment, Category 1

**GHS LABEL**

Exclamation mark (GHS 07)
Environment (GHS 09)

**SIGNAL WORD:** WARNING

**HAZARD STATEMENTS**
- H320: Causes eye irritation.
- H332: Harmful if inhaled.
- H303: May be harmful if swallowed.
- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long lasting effects.

**PRECAUTIONARY STATEMENT(S)**
Prevention:
- P202: Do not handle until all safety precautions have been read and understood.
- P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
- P270: Do not eat, drink, or smoke when using this product.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Storage:
- P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Disposal:
- P501: Dispose of contents/container to an approved waste disposal plant.

COMMENTS: This material is considered hazardous by the 2012 OSHA Hazard Communication Standard [29 CFR 1910.1200(a)(1)], and the G.H.S.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esfenvalerate</td>
<td>6.4</td>
<td>66230-04-4</td>
</tr>
<tr>
<td>Petroleum Distillates</td>
<td>&lt; 2</td>
<td>64742-47-8</td>
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</tbody>
</table>

COMMENTS: Ingredients not identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

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. 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: If swallowed, IMMEDIATELY call a poison control center or doctor for treatment advice. DO NOT give any liquid to the person. Do not induce vomiting unless told to do so by a poison control center or a doctor. Never give anything by mouth to an unconscious person.

INHALATION: Remove affected person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

NOTES TO PHYSICIAN: For skin effects, a highly efficient therapeutic agent for pyrethroid exposure is topical application of tocopherol acetate (Vitamin E). Diazepam has been recommended to reduce the CNS effects of Esfenvalerate.

5. FIRE FIGHTING MEASURES
SAFETY DATA SHEET (GHS)

Onslaught® Microencapsulated Insecticide

FLAMMABLE CLASS: This product is NOT classified as flammable or combustible by OSHA.

EXTINGUISHING MEDIA: Use water spray, foam, carbon dioxide or dry chemical.

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions this product may support combustion and may decompose to give off toxic gases such as HYDROGEN CYANIDE, carbon monoxide, carbon dioxide, and nitrogen oxides.

FIRE FIGHTING PROCEDURES: Use a full-faced self-contained breathing apparatus along with full protective gear. Keep nearby containers and equipment cool with a water stream.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Stop release, if possible without risk. Dike or contain release, if possible, and if immediate response can prevent further damage or danger. Isolate and control access to the release area. Take actions to reduce vapors. Absorb with appropriate absorbent such as sand, or vermiculite. Clean spill area of residues and absorbent.

LARGE SPILL: Stop release, if possible without risk. Dike or contain release, if possible, and if immediate response can prevent further damage or danger. Isolate and control access to the release area. Take actions to reduce vapors. Collect product into drums, storage tanks, etc., via drains, pumps, etc. Absorb with appropriate absorbent such as sand or vermiculite. Clean spill area of residues and absorbent.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Contains Pyrethroids, which are toxic to fish and other aquatic invertebrates. Contaminated absorbent and wash water should be disposed of according to local, state/provincial and federal/national regulations.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: DO NOT APPLY THIS PRODUCT IN OR ON ELECTRICAL EQUIPMENT DUE TO THE POSSIBILITY OF SHOCK HAZARD.

HANDLING: Wear OSHA-approved safety glasses with side-shields, safety goggles, or a full-face shield. Mechanical ventilation should be used when handling this product in enclosed spaces. Do not contaminate water, food or feedstuffs by storage, handling, or disposal.

READ AND OBSERVE ALL PRECAUTIONS AND INSTRUCTIONS ON THE PRODUCT LABEL.

STORAGE: Store in a cool, dry area under lock and key. Post as a pesticide storage area. DO NOT allow product to exceed 160°F (71.1°C) as HYDROGEN CYANIDE GAS may be produced. Always store pesticides in the original container. Store away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Place liquid formulations on lower-shelves, and dry formulations above.

KEEP OUT OF REACH OF CHILDREN

8. EXPOSURE CONTROLS / PERSONAL PROTECTION
EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>SupplierOEL</th>
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<tbody>
<tr>
<td></td>
<td>ppm</td>
<td>mg/m³</td>
<td>ppm</td>
</tr>
<tr>
<td>Esfenvalerate</td>
<td>TWA</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OSHA TABLE COMMENTS:
1. Skin
2. As oil-mist, if generated.

ENGINEERING CONTROLS: Mechanical ventilation should be used when handling this product in enclosed spaces. Local exhaust ventilation may be necessary.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear OSHA-approved safety glasses with side-shields, safety goggles, or a full-face shield.

SKIN: Take prudent precautions to avoid contact with skin and clothing.

WORK HYGIENIC PRACTICES: DO NOT SMOKE, EAT, OR DRINK, OR APPLY COSMETICS IN WORK AREA!

Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking, or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Odorless.

APPEARANCE: Creamy, yellow/ light-brown color.

pH: 5.5

Notes: @ 10% in water.

FLASHPOINT AND METHOD: > 93.3°C (200°F) TAG Closed Cup

VAPOR DENSITY: Heavier than air.

FREEZING POINT: Not Available

SOLUBILITY IN WATER: Immiscible in water.

SPECIFIC GRAVITY: 1.02 (Water = 1) at 20°C (68°F)

VISCOsITY #1: 1025 CPS at 18.5°C (65.3°F) Brookfield

(VOC): < 2.000 %

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No
SAFETY DATA SHEET (GHS)

Onslaught® Microencapsulated Insecticide

CONDITIONS TO AVOID: Not compatible with strong acids or bases. Not compatible with strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: See Section 5 for combustion products.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD\textsubscript{50}: > 2000 mg/kg

Notes: Albino rabbit.

ORAL LD\textsubscript{50}: > 2000 mg/kg

Notes: Albino rat.

INHALATION LC\textsubscript{50}: > 2.06 mg/L

Notes: Rats exposed for 4 hours to test atmosphere. The Acute Inhalation LC\textsubscript{50} of this material places it in EPA Toxic Category IV.

EYE EFFECTS: Irritation clearing by Day 4.

SKIN EFFECTS: Slight irritation at 72 hours. Irritation Index = 1.0

SENSITIZATION: Negative; Not considered to be a dermal sensitizer to albino guinea pigs.

GENERAL COMMENTS: The above toxicity data was bridged from the insecticide concentrate, that is used in the manufacture of this end-use product.

COMMENTS: None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as being carcinogens.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: This product is toxic to fish and other aquatic invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters, or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters, unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the Environmental Protection Agency (EPA).

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: To avoid wastes, use all materials in the containers by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (NOTE: such programs are often run by state or local governments, or by industry).

EMPTY CONTAINER: Non-refillable container. DO NOT reuse or refill this container. Triple-rinse container (or equivalent) promptly after emptying.

Triple-rinse as follows for containers less than < 5 gallons (< 18.9 L) or less: Empty the remaining contents into application equipment or a mix-tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and re-cap.
Onslaught® Microencapsulated Insecticide

Shake for 10 seconds. Pour rinsate into application equipment or a mix-tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

Triple-rinse as follows for containers greater than > 5 gallons (> 18.9 L): Empty the remaining contents into application equipment or a mix-tank. Fill the container \( \frac{1}{4} \) full with water. Replace and tighten closures. Tip container on its side and roll back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix-tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

RCRA/EPA WASTE INFORMATION: None of the ingredients in this product appear on the RCRA lists (40 CFR 261.24, 40 CFR 251.33) or CERCLA Hazardous Substance list (40 CFR Part 302 Table 302.4)

14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**
- **PROPER SHIPPING NAME:** Insecticides, Insect or Animal Repellent, Liquid, N.O.S.
- **PRIMARY HAZARD CLASS/DIVISION:** Non-Hazardous

**AIR (ICAO/IATA)**
- **SHIPPING NAME:** Insecticides, Insect or Animal Repellent, Liquid, N.O.S.
- **PRIMARY HAZARD CLASS/DIVISION:** Non-Hazardous

**VESSEL (IMO/IMDG)**
- **SHIPPING NAME:** Not Available

15. REGULATORY INFORMATION

**UNITED STATES**

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**
- **FIRE:** No  
- **PRESSURE GENERATING:** No  
- **REACTIVITY:** No  
- **ACUTE:** Yes

**313 REPORTABLE INGREDIENTS:** This product contains no SARA Title III Section 313 chemicals that exceed the reporting limits.

**302/304 EMERGENCY PLANNING**
- **EMERGENCY PLAN:** There are no SARA Title III Section 302 extremely hazardous substances present in this formulation (40 CFR 355).

There are no components that are subject to emergency requirements under CERCLA Section 103(a)(40 CFR 302.4) in this formulation.

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**
- **TSCA STATUS:** All chemical substances found in this product comply with the Toxic Substances Control Act's inventory reporting requirements.

**REGULATIONS**
- **STATE REGULATIONS:**
  - **VOLATILE ORGANIC COMPOUNDS (VOC):**
This product contains less than 2% VOC’s.

FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT):

NOTE: 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, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

CAUTION. Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. Contains petroleum distillates - Vomiting may cause aspiration pneumonia. Avoid contact with skin, eyes, and clothing.

Personal Protective Equipment (PPE):

Wear OSHA-approved safety glasses with side-shields, safety goggles, or a full face-shield.

PHYSICAL OR CHEMICAL HAZARDS: Do not use or store near heat or open flame. Do not use this product in or on electrical equipment due to the possibility of shock hazard.

16. OTHER INFORMATION

REVISION SUMMARY: This MSDS replaces the 1/22/2010 MSDS. Revised: Section 2: EMERGENCY OVERVIEW - IMMEDIATE CONCERNS POTENTIAL HEALTH EFFECTS (SKIN, SKIN ABSORPTION, INHALATION, INGESTION). Section 4: CHRONIC EFFECTS, NOTES TO PHYSICIAN. Section 7: HANDLING. Section 10: HAZARDOUS DECOMPOSITION PRODUCTS. Section 12: ECOTOXICOLOGICAL INFORMATION. Section 13: EMPTY CONTAINER. Section 15: 313 REPORTABLE INGREDIENTS.

HMIS RATING

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
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</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>1</td>
</tr>
<tr>
<td>Personal Protection</td>
<td></td>
</tr>
</tbody>
</table>

HMIS RATINGS NOTES: We assign HMIS ratings to this product based on the hazards of its ingredients(s). Since the customer is most aware of the applications and conditions of use, he or she must ensure that the proper Personal Protective Equipment is provided, consistent with the information contained in Section’s 2, 7, and 8 of this MSDS.

COMMENTS: The data contained herein are based on information currently available to McLaughlin Gormley King Company and, to the best of our knowledge, are accurate and based on sound expert opinion. Our statements herein, however, are not to be taken as a warranty or representation for which McLaughlin Gormley King Company assumes legal responsibility.

MSDS Prepared by T. Azzivitto