MATERIAL SAFETY DATA SHEET

Date Issued: 10/11/2005
MSDS No: ONSLAUGHT
Date-Revised: 01/22/2010
Revision No: 4

Onslaught® Microencapsulated Insecticide

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Onslaught® Microencapsulated Insecticide
PRODUCT DESCRIPTION: A Microencapsulated Insecticide.
PRODUCT CODE: 028371, EPA REG. NO. : 1021-1815
ACTIVE INGREDIENT(S): Esfenvalerate

MANUFACTURER

McLaughlin Gormley King Company
8810 10th Avenue North
Minneapolis, MN 55427
Product Stewardship: (888) 740-8712
Alternate Emergency Phone: (952) 852-9509
Service Number: (763) 544-0341
Alternate Customer Service: (800) 645-6466

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC U.S. and CANADA:(800) 424-9300
CHEMTREC All Other Areas:(703) 527-3887
Emergency Phone:(888) 740-8712

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

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

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: CAUTION. Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, and clothing.
Wear OSHA-approved safety glasses with side-shields, safety goggles, or a full-face shield.
Contains petroleum distillates - Vomiting may cause aspiration pneumonia.

POTENTIAL HEALTH EFFECTS

EYES: Causes moderate eye irritation.

SKIN: Can cause skin irritation. Can cause a burning or prickling sensation on more sensitive areas (face, eyes, mouth).

SKIN ABSORPTION: Harmful if absorbed through the skin.

INGESTION: Harmful if swallowed. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe lung injury.

INHALATION: Excessive inhalation may be irritating to the respiratory tract.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

CHRONIC EFFECTS: None known.

COMMENTS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS
Esfenvalerate	6.4	66230-04-4	Not Avail.
Petroleum Distillates	< 2	64742 -47-8	265-149-8

MATERIAL SAFETY DATA SHEET

Date Issued: 10/11/2005
MSDS No: ONSLAUGHT
Date-Revised: 01/22/2010
Revision No: 4

Onslaught® Microencapsulated Insecticide

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 contol 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: Contains Pyrethroids and Petroleum Distillates - vomiting may pose an aspiration pneumonia hazard.
Diazepam has been recommended to reduce the CNS effects of Esfenvalerate.
For skin effects, a highly efficient therapeutic agent for Pyrethroid exposure is topical application of Tocopherol Acetate (Vitamin E).

5. FIRE FIGHTING MEASURES

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

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 USE IN OR AROUND ELECTRICAL EQUIPMENT DUE TO THE POSSIBILITY OF SHOCK HAZARD. Do not use or store near heat, sparks, open flame, or any other ignition sources.

MATERIAL SAFETY DATA SHEET

Date Issued: 10/11/2005
MSDS No: ONSLAUGHT
Date-Revised: 01/22/2010
Revision No: 4

Onslaught® Microencapsulated Insecticide

HANDLING: Wear OSHA-approved safety glasses with side-shields, safety goggles, or a full-face shield. DO NOT allow product to exceed 160°F (71.1°C) as HYDROGEN CYANIDE GAS may be produced. Mechanical ventilation should be used when handling this product in enclosed spaces. Do not contaminate water, feed or food by storage, handling or disposal. Read and observe all precautions and instructions on the 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)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		SupplierOEL	
Chemical Name		**ppm**	**mg/m³**	**ppm**	**mg/m³**	**ppm**	**mg/m³**
Esfenvalerate	**TWA**	None		None		[1]	2 [1]
Petroleum Distillates	**TWA**	None		None		100	525
OSHA TABLE COMMENTS: **1**. Skin							

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.

VAPOR DENSITY: Heavier than air.

FREEZING POINT: Not Available

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

SOLUBILITY IN WATER: Immiscible in water.

SPECIFIC GRAVITY: 1.020 (Water = 1) at 20°C (68°F)

MATERIAL SAFETY DATA SHEET

Date Issued: 10/11/2005
MSDS No: ONSLAUGHT
Date-Revised: 01/22/2010
Revision No: 4

Onslaught® Microencapsulated Insecticide

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

(VOC): < 2.000 %

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

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

HAZARDOUS DECOMPOSITION PRODUCTS: HYDROGEN CYANIDE GAS may be formed by thermal decomposition at 160°F (71.1°C) or higher, or by contact with alkaline substances such as soda ash & lye.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD_{50}: > 2000 mg/kg

Notes: Albino rabbit.

ORAL LD_{50}: > 2000 mg/kg

Notes: Albino rat.

INHALATION LC_{50}: The Acute Inhalation LC_{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. Do not apply directly to water. Do not contaminate water when disposing of equipment wash waters. 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 EPA.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: To avoid wastes, use all material in the container 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 as follows: 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. 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

MATERIAL SAFETY DATA SHEET

Date Issued: 10/11/2005
MSDS No: ONSLAUGHT
Date-Revised: 01/22/2010
Revision No: 4

Onslaught® Microencapsulated Insecticide

flow begins to drip. Repeat this procedure two more times. Then, offer for recycling if available, or puncture and dispose of container 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, 40CFR 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:
COMPONENT, CAS#, Max %

Esfenvalerate, 066230-04-4, 6.40

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.

16. OTHER INFORMATION

REVISION SUMMARY: Revision #: 4. This MSDS replaces the January 22, 2010 MSDS., Any changes in information are as follows: In Section 9: (Group Field) for Vapor Pressure, (Group Field) for Water Solubility, (Group Field) for Evaporation RateIn Section 13: Empty Container, Disposal

MATERIAL SAFETY DATA SHEET

Date Issued: 10/11/2005
MSDS No: ONSLAUGHT
Date-Revised: 01/22/2010
Revision No: 4

Onslaught® Microencapsulated Insecticide

HMIS RATING

HEALTH:	1
FLAMMABILITY:	1
PHYSICAL HAZARD:	1
PERSONAL PROTECTION:	

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 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