



MATERIAL SAFETY DATA SHEET

SECTION I – IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY		
TRADE NAME:	CheckMate® OFM-SL	
SYNONYMS:	430 mg OFM mating disruption dispenser	
USE:	CheckMate® OFM-SL is a hand-applied product that emits the pheromone of the oriental fruit moth (<i>Grapholita molesta</i>). The product is used in agriculture to control populations of this pest via mating disruption.	
COMPANY IDENTIFICATION:	Suterra LLC 20950 NE Talus Place Bend, Oregon 97701 U.S.A. TEL: (541) 388-3688 FAX: (541) 388-3705	
EMERGENCY TELEPHONE NUMBERS:		
LEAK, FIRE, SPILL, OR ACCIDENT:	(800) 424-9300 (CHEMTREC – U.S.A. & CANADA) (703) 527-3887 (CHEMTREC – Collect - All Other Countries)	
MEDICAL:	Call Doctor, Poison Control Center or (541) 388-3688	
SECTION II – HAZARDS IDENTIFICATION		
None of the ingredients of this material meet the definition of "Hazardous Chemical" given in OSHA Hazard Communication Regulation 29 CFR 1910.1200(c). The information on this form is furnished as a customer service.		
SECTION III - COMPOSITION		
PRINCIPAL COMPONENT(S)	CAS NO.	CHEMICAL FORMULA
Z-8-dodecen-1-yl acetate	28079-04-1	C ₁₄ H ₂₆ O ₂
E-8-dodecen-1-yl acetate	38363-29-0	C ₁₄ H ₂₆ O ₂
Z-8-dodecen-1-ol	40642-40-8	C ₁₂ H ₂₄ O

SECTION IV – FIRST AID MEASURES

EYE CONTACT:	Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if worn after the first five minutes and continue rinsing. Call a doctor or Poison Control Center for advice.
SKIN CONTACT:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a doctor or Poison Control Center for advice.
INHALATION:	Move 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 doctor or Poison Control Center for advice.
INGESTION:	Call a doctor or Poison Control Center immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a Poison Control Center or doctor. Do not give anything by mouth to an unconscious person.

SECTION V – FIREFIGHTING MEASURES

FLASH POINT (Method Used)	FLAMMABLE LIMITS (% by Volume in Air)	LEL	UEL
Not established for formulation 230°F for OFM pheromone blend.	Not established.	Not established.	Not established.

EXTINGUISHING MEDIA: Dry Chemical, Foam, Carbon Dioxide (CO₂)

UNUSUAL FIRE AND EXPLOSION HAZARDS: Carbon oxides formed when burned.

ADVICE FOR FIREFIGHTERS: Evacuate area of all unnecessary personnel. Use standard fire fighting procedures.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Large spills can be swept up. Protect from ignition. Keep out of water sources or sewers.

SECTION VII – HANDLING AND STORAGE

Wear protective equipment described in Section VIII. Avoid skin and eye contact. Avoid breathing vapors. Store in cool, well ventilated area. Protect from ignition. Wash hands after handling. Do not allow product to contaminate water sources, food or feed.

SECTION VIII – EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE LIMIT VALUES**

RECOMMENDED EXPOSURE LIMITS: None established.

LISTED AS CARCINOGEN BY NTP, IARC, OR OSHA: No.

OTHER HEALTH EFFECTS: No known adverse effects expected.

HEALTH HAZARD CATEGORIES: EPA Toxicity Category: III - CAUTION.

EFFECTS OF OVEREXPOSURE	
EYE CONTACT:	Pheromone is mildly irritating. Avoid contact with eyes when in contact with dispenser membrane.
SKIN CONTACT:	Pheromone is moderately irritating. Avoid contact of skin with dispenser membrane.
INHALATION:	Avoid breathing vapors when in confined areas.
INGESTION:	Due to product form ingestion is not considered likely.
CHRONIC:	Long-term studies have not been done on the concentrated active ingredient, however, no adverse effects expected.
EXPOSURE CONTROLS	
RESPIRATORY PROTECTION:	Not generally required under normal use conditions.
PROTECTIVE GLOVES:	Use chemical resistant gloves when handling dispensers.
EYE PROTECTION:	Wear protective eyewear.
OTHER PROTECTIVE EQUIPMENT:	Not generally required under normal use conditions.
VENTILATION:	Use adequate ventilation.
NOTE:	Personal protection information provided in this Section is based upon label information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.
SECTION IX –PHYSICAL AND CHEMICAL PROPERTIES	
APPEARANCE	Plastic hand-applied dispenser.
ODOR	Mild, herbaceous odor.
MOLECULAR WEIGHT	Not established for end-use dispenser. 636 for OFM pheromone blend.
pH	Not established.
SOLUBILITY IN WATER	Not applicable for end-use dispenser. Low solubility for OFM pheromone blend.
BOILING POINT	Not applicable for end-use dispenser. 120-125°C @ 3mmHg for OFM pheromone blend.
MELTING POINT	Not applicable for end-use dispenser. > 0°C for OFM pheromone blend.
FLASH POINT	Not established for end-use dispenser. 230°F for OFM pheromone blend.
FLAMMABILITY	Not established.
SPECIFIC GRAVITY (H ₂ O = 1)	Not established for end-use dispenser. 0.88 ± 0.01 for OFM pheromone active ingredient.
EXPLOSIVE PROPERTIES	Not established
OXIDIZING PROPERTIES	Not established

SECTION X – STABILITY AND REACTIVITY DATA

STABILITY:	The product is stable. No dangerous reactions are expected. Pheromone is sensitive to heat and light.
INCOMPATIBILITY:	Pheromone to strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon oxides formed when burned.
HAZARDOUS POLYMERIZATION:	Will not occur.

SECTION XI – TOXICOLOGICAL INFORMATION

Due to the formulation type, no studies have been performed on the end-use product.
Information about the pheromone active ingredient is reported here:

Oriental Fruit Moth (OFM) Pheromone Blend:

LD ₅₀ , Oral, Rat:	> 5050 mg/kg
LD ₅₀ , Dermal, Rabbit:	> 5050 mg/kg
LD ₅₀ , Intratracheal, Rat:	> 2 mg/L
Eye Irritation, Rabbit:	Mildly irritating.
Skin Irritation, Rabbit:	Moderately irritating.
Ames Mutation Assay:	Negative.

SECTION XII – ECOLOGICAL INFORMATION

Due to the formulation type, no studies have been performed on the end-use product.
Information about the pheromone active ingredients is reported here:

Oriental Fruit Moth (OFM) Pheromone Blend:

Acute Avian LD ₅₀ Bobwhite Quail:	> 2050 mg/kg
Acute Fish 96 Hour LC ₅₀ Rainbow Trout:	> 0.99 mg/L
Aquatic Invertebrate 48 Hour EC ₅₀ <i>Daphnia</i>	> 100 mg/L

SECTION XIII – DISPOSAL CONSIDERATIONS

ENVIRONMENTAL HAZARDS/ WASTE DISPOSAL:

Used dispensers should be wrapped in newspaper, placed in garbage bags and discarded. Do not reuse containers. Discard in trash. Dispose of in accordance with local, state, and federal regulations.

USED DISPENSER AND CONTAINER DISPOSAL:

Used dispensers should be wrapped in newspaper, place in garbage bag and discarded in trash. Nonrefillable container. Do not reuse or refill containers.

Plastic containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Bag/Cardboard box: Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION XIV – TRANSPORT INFORMATION

TRANSPORT BY GROUND:

Description: Plastic hand-applied pheromone dispenser.
Hazard Class: Not applicable – Not classified as dangerous.
Identification Numbers: Unclassified.
Packing Group: Not applicable.
Flashpoint: Not established for end-use dispenser.

TRANSPORT BY AIR:

Description: Plastic hand-applied pheromone dispenser.
Hazard Class: Not applicable – Not classified as dangerous.
Identification Numbers: Unclassified.
Packing Group: Not applicable.
Flashpoint: Not established for end-use dispenser.

SECTION XV – REGULATORY INFORMATION

REGULATORY LICENSE: U.S. EPA Registration Number 56336-46
Product is categorized under U.S. EPA Toxicity Health Hazard Category III – CAUTION

SECTION XVI – OTHER INFORMATION

Suterra LLC is unaware of any local, state or federal regulations which define the active ingredient as hazardous.

As of the preparation date, this product did not contain a chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

While this information and recommendations set forth are believed to be accurate as of the date hereof, Suterra LLC makes no warranty with respect hereto and disclaims all liability from reliance thereon.

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