



SAFETY DATA SHEET

SECTION I – IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

TRADE NAMES:	CheckMate® NOW-F
SYNONYMS:	Navel Orangeworm Sprayable mating disruption formulation
USE:	The product is used in agriculture to control populations of this pest via the mating disruption technique.
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

The following determinations have been made according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals:

GHS Signal Word: WARNING

GHS Symbols:



GHS Hazard Statements:

Harmful if inhaled
Causes skin irritation
Causes eye irritation

GHS Precautionary Statements:

Avoid breathing vapor. Use only outdoors or in a well ventilated area.
Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.
Use protective gloves and protective garments to prevent excessive skin contact when handling.

GHS Response Statements:

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a Poison Control Center or doctor for advice if you feel unwell.

If on skin or clothing: Take off contaminated clothing and wash before reuse. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for advice if you feel unwell, or if skin irritation occurs.

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.

GHS Storage Statements:

Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.

SECTION III - COMPOSITION

PRINCIPAL COMPONENT(S)	CAS NO.	CHEMICAL FORMULA	APPROXIMATE w/w%
(Z,Z)-11,13-Hexadecadienal	71317-73-2	C ₁₆ H ₂₈ O	1.16
Water	7732-18-5	H ₂ O	>72

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
Product is non-flammable.	Not established	Not established.	Not established.
EXTINGUISHING MEDIA: Not applicable for formulation >72% water. If water boils off, use the following: Dry Chemical, Foam, Carbon Dioxide (CO ₂)			

UNUSUAL FIRE AND EXPLOSION HAZARDS:	None.
ADVICE FOR FIREFIGHTERS:	Evacuate area of all unnecessary personnel. Use standard fire fighting procedures. Carbon oxides formed when burned.
SECTION VI – ACCIDENTAL RELEASE MEASURES	
Wear protective gloves, clothing and eye protection. Contain spill by diking. Use absorbent and shovel into a clean container. Protect from ignition. Keep out of water sources or sewers.	
SECTION VII – HANDLING AND STORAGE	
Store in a cool, well ventilated area until used. Protect from freezing. Protect from ignition. Wear protective equipment described in Section VIII. Avoid skin and eye contact. Avoid breathing vapors. Wash hands after handling. Do not allow product to contaminate water sources, food or feed. Provide means of controlling spills.	
SECTION VIII – EXPOSURE CONTROLS / PERSONAL PROTECTION	
EXPOSURE LIMIT VALUES	
RECOMMENDED EXPOSURE LIMITS:	None established for end-use product.
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.
SKIN CONTACT:	Pheromone is moderately irritating. Avoid contact with skin.
INHALATION:	May cause transient irritation. Avoid breathing vapors when in confined areas.
INGESTION:	Due to product form ingestion is not considered likely. May cause upset stomach in large doses.
CHRONIC:	Long-term studies have not been conducted, however, no adverse effects are expected.
EXPOSURE CONTROLS	
RESPIRATORY PROTECTION:	Not generally required under normal use conditions.
PROTECTIVE GLOVES:	Use protective gloves.
EYE PROTECTION:	Wear protective eyewear.
OTHER PROTECTIVE EQUIPMENT:	Not generally required under normal use conditions.
VENTILATION:	Use outdoors. If handled indoors, provide 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	Solid microcapsules containing pheromone in aqueous suspension.
ODOR	Mild odor.
MOLECULAR WEIGHT	Not established for end-use formulation. ~236 for NOW pheromone.
pH	Not established.
SOLUBILITY IN WATER	Not applicable for end-use product which consists of microcapsules in an aqueous suspension. Low solubility for NOW pheromone.
BOILING POINT	Not applicable for end-use formulation. 311.5 ± 0.2 °C for NOW pheromone.
MELTING POINT	Not applicable for end-use formulation. 5.9 ± 0.1 °C for NOW pheromone.
FLASH POINT	No data for end-use formulation. 152.3 ± 0.8 °C for NOW pheromone.
FLAMMABILITY	Not established. End-use formulation is not flammable.
SPECIFIC GRAVITY (H ₂ O = 1)	0.96
EXPLOSIVE PROPERTIES	No explosive ingredients
OXIDIZING PROPERTIES	Not an oxidant or reductant
SECTION X – STABILITY AND REACTIVITY DATA	
STABILITY:	The product is stable. No dangerous reactions are expected. Pheromone is sensitive to heat and light.
INCOMPATIBILITY:	None. Formulation is stable to heat and UV-light as packaged. Formulation will degrade in the presence of strong oxidizing agents and oxygen.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon oxides formed when burned.
HAZARDOUS POLYMERIZATION:	Will not occur.
SECTION XI – TOXICOLOGICAL INFORMATION	
<p>Due to the formulation type, no studies have been performed on the end-use product. Information about the pheromone active ingredient is reported here:</p> <p>Specific test values not established for NOW pheromone. Using the U.S. EPA Straight-Chained Lepidopteran Pheromone (SCLP) similarity argument, the toxicity of the subject pheromone would be placed into EPA toxicity category III-IV: CAUTION. The oral and dermal toxicity would be estimated to be higher than 5,000 mg/kg. Eye and skin irritation would be estimated from minimal to moderate, respectively.</p> <p>This SCLP is exempted from the requirement of a tolerance on food and feed (40 CFR § 180.1153 / Federal Register 71: 45395-45400 August 9, 2006).</p>	

Navel Orangeworm (NOW) Pheromone:

LD50, Oral, Rat:	No data found
LD50, Dermal, Rabbit:	No data found
LD50, Intratracheal, Rat:	No data found
Eye Irritation, Rabbit:	No data found
Skin Irritation, Rabbit:	No data found
Ames Mutation Assay:	No data found
Sensitization, Guinea Pig:	No data found
Carcinogenicity:	No data found
Reproductive toxicity:	No data found
Target organ toxicity:	No data found

SECTION XII – ECOLOGICAL 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:

Specific test values for Navel Orangeworm (NOW) Pheromone have not been established. Comparison with chemically similar synthetically produced replicas of naturally occurring Straight-Chained Lepidopteran Pheromone (SCLP) pheromones would indicate little, if any, non-target organism toxicity, and no significant environmental fate concerns for soil, water or air.

SECTION XIII – DISPOSAL CONSIDERATIONS

ENVIRONMENTAL HAZARDS/ WASTE DISPOSAL:

DO NOT contaminate water, food, or feed by storage and disposal.

For terrestrial uses. DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the high-water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate water when disposing of equipment washwater. Dispose of in accordance with local, state, and federal regulations.

CONTAINER DISPOSAL:

Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying.

Triple rinse as follows: Empty remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill container 1/4 full with water and recap. Shake 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and or 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: Solid microcapsules containing pheromone in an aqueous suspension.
Hazard Class: DOT – Not classified as dangerous.
Identification Numbers: Unclassified.
Packing Group: Not applicable.
Flashpoint: Not established for end-use formulation. Non-flammable. Formulation is > 72% water.

TRANSPORT BY SEA:

Description: Solid microcapsules containing pheromone in an aqueous suspension.
Hazard Class: IMDG – Not classified as dangerous.
Identification Numbers: Unclassified.
Packing Group: Not applicable.
Flashpoint: Not established for end-use formulation. Non-flammable. Formulation is > 72% water.

TRANSPORT BY AIR:

Description: Solid microcapsules containing pheromone in an aqueous suspension.
Hazard Class: IATA – Not classified as dangerous.
Identification Numbers: Unclassified.
Packing Group: Not applicable.
Flashpoint: Not established for end-use formulation. Non-flammable. Formulation is > 72% water.

SECTION XV – REGULATORY INFORMATION

This product is a pesticide registered by the U.S. EPA 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 (SDSs), and for workplace labels of non-pesticide chemicals.

U.S. EPA Registration Number 56336-38.

Product is categorized under U.S. EPA Toxicity Health Hazard Category III – CAUTION

SECTION XVI – OTHER INFORMATION

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.

Version Date: Oct 16, 2018

Supersedes: New

Preparer: R. Trager