

## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION-1 : SUPPLIER AND PRODUCT INFORMATION

**HARMONY ECOTECH PVT. LTD.**

Plot no: 19, Green Lands Enclave, Jonnabanda  
Old Alwal, Secunderabad, Telangana - 500 010.  
Tel: +91 98661 59683 / 93987 14352  
Email: info@harmonyecotech.com / info@activeipm.com  
Website: www.activeipm.com / www.harmonyecotech.com

<b>PRODUCT NAME:</b>	<b>PLUTELLA XYLOSTELLA (Diamond Back Moth) PHOROMONE LURE</b>
----------------------	---

### SECTION-2 : HAZARDS IDENTIFICATION FOR ACTIVE INGREDIENTS

<b>Emergency Overview</b>	May be irritating to skin and eyes.
<b>HMIS Rating</b>	Health – 1
	Flammability – 1
	Reactivity – 0

### SECTION-3 : COMPOSITION / INFORMATION ON INGREDIENTS

The following ingredients are loaded into a rubber septum.

Chemical Name	CAS #	Molecular formula
Z-11-Hexadecenal	53939-28-9	$C_{16}H_{30}O$
Z-11-Hexadecenyl acetate	34010-21-4	$C_{18}H_{34}O_2$

**SECTION-4 : FIRST AID MEASURES FOR ACTIVE INGREDIENTS**

<b>Oral Exposure</b>	Rinse your mouth with sufficient water.
<b>Inhalation Exposure</b>	If inhaled, move to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.
<b>Dermal Exposure</b>	In case of skin contact resulting in irritation flush with copious amounts of water for at least 15 min.
<b>Eye Exposure</b>	In case of contact with eyes, resulting in irritation, flush with copious amount of water for at least 15 min. Assure adequate flushing by separating the eyelids with fingers.

**SECTION-5 : FIRE FIGHTING MEASURES**

<b>Flash Point</b>	N/A
<b>Auto Ignition Temperature</b>	N/A
<b>Flammability</b>	N/A
<b>Extinguishing Media</b>	Carbon dioxide, dry chemical powder or appropriate foam.
<b>Fire Fighting - Protective Equipment</b>	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
<b>Specific Hazard(s)</b>	Not easily combustible. Emits low degree toxic fumes under fire conditions.

**SECTION-6 : ACCIDENTAL RELEASE MEASURES**

<b>Procedure to be followed in case of leak or spill</b>	Evacuate area.
<b>Procedure(s) of personal precaution(s)</b>	Wear self contained breathing apparatus, rubber boots and heavy rubber gloves.
<b>Methods for cleaning up</b>	Cover with dry lime or soda ash, pick up and keep in a closed container for disposal. Ventilate area and wash spill site after material pickup is complete.

**SECTION-7 : HANDLING AND STORAGE**

<b>Handling</b>	Keep the Container tightly closed. Do not breathe vapours.
<b>Storage</b>	Keep away from heat, sparks and open flame, store in a cool dry place away from sun light.

**SECTION-8 : EXPOSURE CONTROLS / PPE**

<b>Engineering Controls</b>	No open flames.
<b>Personal Protective Equipment</b>	At a minimum, workers should wear a NIOSH-approved full face air purifying respirator.
<b>Hand</b>	Compatible chemical resistant gloves recommended for prolonged handling.
<b>Eye</b>	Chemical Safety goggles.
<b>General Hygiene Measures</b>	Wash contaminated clothing before reuse. Wash thoroughly after handling.

**SECTION-9 : PHYSICAL / CHEMICAL PROPERTIES**

<b>Appearance</b>	Pink / Dark red colour rubber septum containing active ingredient
<b>Boiling point of active ingredient</b>	348.74 °C. @ 760.00 mm Hg
<b>Density of active ingredient</b>	0.89 g/cm <sup>3</sup>

**SECTION-10 : STABILITY AND REACTIVITY**

<b>Stability</b>	Stable.
<b>Materials to avoid</b>	The performance of this product may be affected by strong oxidizing agents.
<b>Hazardous Decomposition Products</b>	N.A.

Hazardous polymerization	Has not been reported.
--------------------------	------------------------

**SECTION-11 : TOXICOLOGICAL INFORMATION**

<b>Skin Contact</b>	Product might cause skin irritation upon prolonged contact.
<b>Skin Absorption</b>	Product absorbed through the skin upon prolonged contact.
<b>Eye Contact</b>	Product causes eye irritation if directly rubbed in eye.
<b>Inhalation</b>	Product difficult to inhale. But emitted odours may cause irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Signs and Symptoms of Exposure</b>	To the best of our knowledge, the chemical, physical and toxicological properties of the active ingredients have not been thoroughly investigated
<b>Toxicity Data</b>	No data available.

**SECTION-12 : ECOLOGICAL INFORMATION**

No data available.

**SECTION-13 : DISPOSAL CONSIDERATIONS**

<b>Appropriate Method of Disposal of Substance or Preparation</b>	Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent to burn in a chemical incinerator. Observe all federal, state, and local environmental laws.
---	--

**SECTION-14 : TRANSPORT INFORMATION**

<b>DOT</b>	None
<b>IATA</b>	None

Sea (IMDG)	None
------------	------

**SECTION-15 : REGULATORY INFORMATION**

<b>European Information</b>	Based on toxicological studies in the published literature, there is no risk and safety phrase to assign for this product.
<b>United States Regulatory Information</b>	The active ingredients are listed in the following inventories: TSCA, NSDL, ECL, EINECS (252-397-7)
<b>Listed as carcinogen by NTP, IARC or OSHA</b>	No

**SECTION-16 : OTHER INFORMATION**

<b>HMIS® Hazardous Materials Identification System</b>	HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a registered trade and service mark of the NPCA.
<b>Acronyms</b>	NTP (National Toxicology Program); IARC (International Agency for Research on Cancer); OSHA (Occupational Health and Safety Administration); DOT (U.S. Dept. of Transportation)
<b>Disclaimer</b>	Only for use in crops.

**Warranty:**

The above information was obtained from sources we believe to be reliable; however the information in this MSDS is provided without any warranty, express or implied regarding its correctness. Harmony Ecotech Pvt Ltd., makes no representations or warranties either express or implied, of merchantability, fitness for a particular purpose or of any other nature with respect to the information or the product to which the information refers. Harmony Ecotech Pvt Ltd.'s sole and exclusive liability with respect to products that are proven to Harmony Ecotech Pvt Ltd., satisfaction to be defective or nonconforming shall be the replacement of such products in accordance with Harmony Ecotech Pvt Ltd., instructions. This remedy, in the manner provided herein, shall constitute fulfilment of all liabilities of Harmony Ecotech Pvt Ltd., whether based on contract, tort or otherwise with respect to or arising out of the products. Harmony Ecotech Pvt Ltd., shall not be liable for any incidental, consequential or contingent or special damages.

