



INSECT MONITORING SYSTEMS

September 26, 2010

PRODUCT TECHNICAL DATA

PRODUCT: *RHYFER* - red palm weevil pheromone lure (species: *Rhyncophorus ferrugineus*)

1. Common Name, Commercial Application, Code

Red Palm Weevil pheromone lure, attractant for deployment in pheromone traps, RHYFER

2. Pheromone components and ratios:

- Component 1. 4-methyl-5-nonanol
- Component 2. 4-methyl-5-nonanone

3. Appearance and color of a.i. and formulated product

- Appearance of active ingredients: clear liquid with slight musty odor
- Appearance of formulated product: pheromone saturated paper enclosed in an inert, permeable plastic bag
- Packaging: Non-permeable plastic pouch

4. Kind of formulation / Concentration of a.i.

- Synthetic pheromone
- Load rate per lure: 700 mg

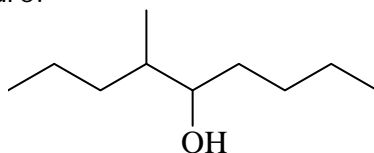
5. Chemical group: Alcohols

Insect sex pheromone - synthetic copy

Component 1:

- CAS Name: 4-methyl-5-nonanol
- CAS Registry #: [154170-44-2]
- Molecular formula: $C_{10}H_{22}O$
- Molecular weight: 158.28
- Boiling point (approx): 70°C
- Solubility: Insoluble in water, soluble in alcohol
- Flash point (approx): 86°C

Structure:



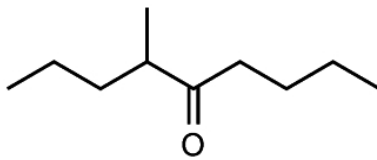
Component 2:

- CAS Name: 4-methyl-5-nonanone
- CAS Registry #: [35900-26-6]
- Molecular formula: $C_{10}H_{20}O$
- Molecular weight: 156.26
- Boiling point (approx): 90°C
- Solubility: Insoluble in water, soluble in alcohol
- Flash point (approx): 72°C

Structure:



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6. Longevity

- Pheromone is released from lure at a controlled rate over a period of 65 days.
- Lure must be replaced at 65 day intervals.
- Release rate: Approx: 10 mg/24hrs at constant 24°C

7. Method of Analysis

Gas chromatography