

#### **UNIQUE**

#### SUSPO-EMULSION TECHNOLOGY BREAKTHROUGH

#### FROM ENSYSTEX

In a Professional Pest Management Industry first, Ensystex's state-of-the-art formulation laboratories bring a new concept in insecticide formulation technology to the professional pest management market. This allows for our unique combination of three active ingredients, with strongly differing physical properties, in one formulation.

As a suspo-emulsion (SE) DELTATHOR PLUS consists of an organic phase with dissolved active ingredients, and an aqueous suspension phase, in which the deltamethrin is dispersed in water.



An emulsion in water of tetramethrin-R 25:75 with piperonyl butoxide

deltamethrin

piperonyl butoxide

2

A suspension concentrate of leltamethrin particles

The two formulations co-exist in the one bottle, creating a suspo-emulsion

Shake before use to agitate the Suspo-emulsion, activating the formulation.

#### In essence this gives you two formulations in the one bottle:



## An emulsion in water of tetramethrin-R 25:75 with piperonyl butoxide



An emulsion in water (EW) of finely distributed droplets of tetramethrin-R 25:75 with piperonyl butoxide to provide fast knockdown and, if required, kill of pyrethroid tolerant insects.





#### A suspension concentrate of deltamethrin particles



A suspension concentrate (SC) of finely distributed particles of deltamethrin for long term residual performance. An even distribution ensures **DELTATHOR PLUS** is the most complete insecticide available to Professional Pest Managers.



# DELTATHOR PLUS EXTRA-FAST KNOCKDOWN

A real problem with pyrethroid insecticides is the way they can scatter the insects, since it takes a few minutes for them to die. This in turn can lead to a spread of the problem. Now **DELTATHOR PLUS** provides a total solution through the fast action of tetramethrin-R 25:75.

#### **DELTATHOR PLUS**

### LONG TERM RESIDUAL ACTION

Long term residual action is provided through the tried and trusted premium performance of the residual pyrethroid, deltamethrin. Contained in the formulation as microparticles, the deltamethrin will remain locked on surfaces to keep on killing. Plus, the unique action provided by the organic phase ensures more even coverage.

# **DELTATHOR PLUS**THE RESISTANCE FIGHTER



If the enzymes that confer the resistance can be inhibited, then the portion of resistance that is conferred can be eliminated.

This is the theory behind DELTATHOR PLUS.

Piperonyl butoxide works to inhibit the enzymes that breakdown and detoxify the pyrethroids, thus restoring their effectiveness against resistant or tolerant insects. Moreover it has also been proven to delay resistance development.

Piperonyl butoxicde is a specific inhibitor of microsomal oxidases<sup>1</sup> and has also been shown to inhibit resistance-associated esterases<sup>2</sup>. Both these modes of action serve to enhance and potentiate the power of DELTATHOR PLUS to ensure you get the best results.

- 1. Bernard BC and Philogéne BJR (1993) Insecticide synergists: role, importance and perspectives. J. Toxicol. Environ. Health. 38: 199-223.
- 2. Perry AS and Buckner AJ (1970) Studies on microsomal cytochrome P-450 in resistant and susceptible houseflies. Life Sci. 9: 335–350.

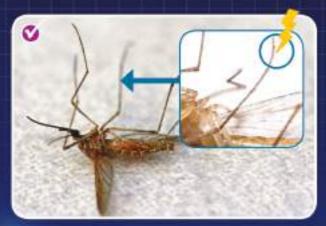
DELTATHOR PLUS allows the pyethroids to strike unrestrained every time.



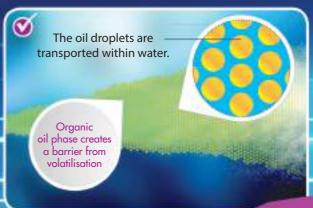
# A new concept in insecticide formulation technology creates a suspo-emulation of three active ingredients, with strongly differing physical properties, in one formulation.

The unique properties of this suspo-emulsion formulation blend allow us to ensure:

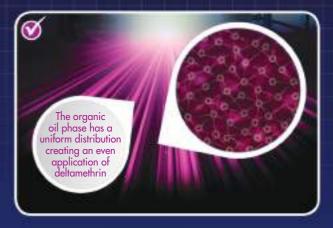
Maximum target insect effectiveness at time of application, through fast knockdown with the organic phase droplets rapidly penetrating the insect cuticle.



**No volatilisation** of the tetramethrin-R 25:75 and piperonyl butoxide (due to the organic oil phase) which further ensures improved knockdown.



More even application of the deltamethrin over surfaces to provide optimal residual performance, through the more even spread created by the fine organic phase.



**Long-term residual performance** through the micro-particles of deltamethrin which remain locked on surfaces to keep on killing.





## =LTATHOR

FLUS'S revolutionary suspo-emulsion formulation combines three active ingredients together to work better than anything you have experienced before.



STOPS CALL BACKS



**V** INCREASES CLIENT SATISFACTION

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#### **FAO Compliant Formulation**

#### **DELTATHOR PLUS**

meets the Food & Agriculture Organisation (FAO) of the World Health Organisation (WHO) guideline for a suspo-emulsion for optimal use in public health programs.

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