

# MAXXTHOR™ *TURBO*

TARGETED INSECTICIDE

**TURBOCHARGE YOUR CLIENTS  
INTO THE FUTURE, TODAY.**

**STOP CALL BACKS, INCREASE CLIENT SATISFACTION THROUGH**

**LONG TERM  
RESIDUAL ACTION**

**SUPERFAST  
KNOCKDOWN**

**RESISTANCE  
FIGHTER**

**AGAINST COCKROACHES AND OTHER HOUSEHOLD INSECTS**

**ENSYSTEX™**

LEADING INNOVATION IN PEST MANAGEMENT



# TURBO CHARGE

YOUR CLIENTS INTO THE FUTURE, TODAY.

Long term protection

Turbo charged

Resistance fighter

100 g/L  
bifenthrin

10 g/L  
imiprothrin

120 g/L  
piperonyl butoxide



# MAXXTHOR™ TURBO

TARGETED INSECTICIDE

## PROVIDES TWO STAGES OF PROTECTION AGAINST HOUSEHOLD INSECTS

### TURBO KILL

#### FAST AND EFFECTIVE RESPONSE

The TURBO charged oil phase enters rapidly through the insect's spiracles; allowing the oil phase insecticides to instantly halt the insect nervous system.

### LONG TERM

#### NO MORE WORRIES

The micro-particles of bifenthrin are evenly spread by the TURBO organic phase ensuring long-term protection.

## MAXXTHOR TURBO's

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



STOPS CALL BACKS



INCREASES CLIENT SATISFACTION

# MAXXTHOR TURBO™

## SUPERFAST KNOCKDOWN



A real problem with pyrethroid insecticides is the way they can scatter the insects, especially cockroaches.

This in turn can lead to a spread of the problem. Now **MAXXTHOR TURBO** provides a total solution through the super fast action of imiprothrin, and its exceptional activity against cockroaches.

This speed of action arises as a consequence of imiprothrin acting much faster at the target site, the insect nervous system, than other pyrethroids. When imiprothrin is applied directly to the cockroach nervous system, there is a rapid decline in spontaneous firing; followed by the rapid and complete disappearance of any charge.

The graph opposite demonstrates the time course of the firing frequency of the central nervous system of the German cockroach treated with  $2.5 \times 10^{-4}$  M imiprothrin. The arrow indicates application of the imiprothrin, where the cockroach receives an instant overdose of electrical activity to the brain, instantly followed by the cessation of all electrical activity.

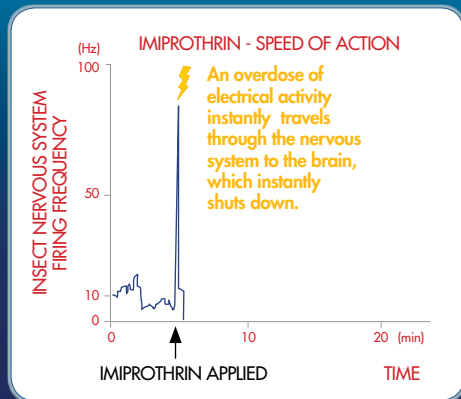
Put us to the test,  
we guarantee  
nothing kills  
cockroaches  
faster than

# MAXXTHOR TURBO

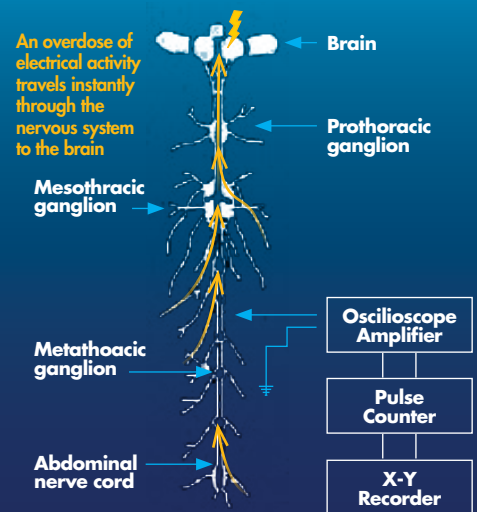
### MAXXTHOR TURBO - SPEED OF ACTION

Insect	Product	Kill Speed KT <sup>50</sup>
GERMAN COCKROACH	<b>MAXXTHOR TURBO</b>	<b>1.5 Seconds</b>
	MAXXTHOR	14 Seconds
HOUSE FLY	<b>MAXXTHOR TURBO</b>	<b>2 Seconds</b>
	MAXXTHOR	21 Seconds
MALARIA MOSQUITO <i>(Aedes aegypti)</i>	<b>MAXXTHOR TURBO</b>	<b>0.25 Seconds</b>
	MAXXTHOR	3.13 Seconds

### IMIPROTHRIN - SPEED OF ACTION



### PROCEDURE FOR ABOVE ELECTROPHYSIOLOGICAL STUDY



**MAXXTHOR TURBO** penetrates the insect cuticle, rapidly traveling through the nervous system to guarantee fast knockdown.



# MAXXTHOR TURBO™

## 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 **MAXXTHOR TURBO**.

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 butoxide 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 **MAXXTHOR TURBO** 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.

# MAXXTHOR TURBO™

## LONG TERM RESIDUAL ACTION



Long Term residual action is provided through the tried and trusted premium performance residual pyrethroid, bifenthrin. Contained in the formulation as micro-particles, the bifenthrin will remain locked on surfaces to keep on killing. Plus, the unique **TURBO** action provided by the organic phase ensures more even coverage.

MAXXTHOR TURBO targets the enzymes that detoxify insecticides

Allowing the pyrethroids to strike unrestrained every time



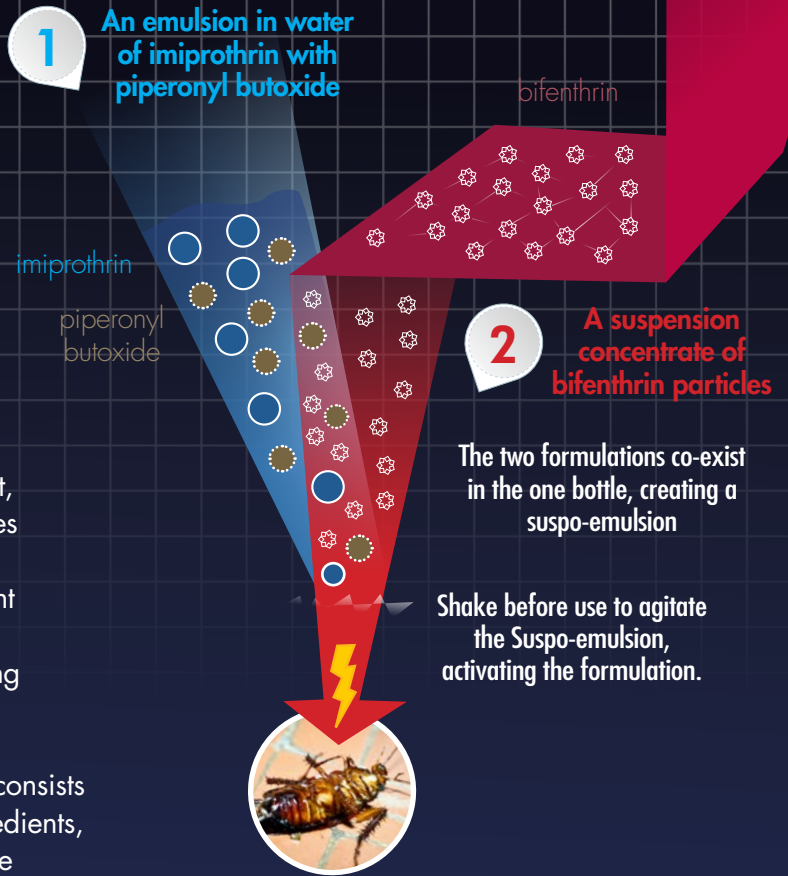
MAXXTHOR TURBO remains active long after application

# UNIQUE SUSPO-EMULSION TECHNOLOGY BREAKTHROUGH FROM ENSYSTEX

In a Professional Pest Management Industry first, Ensysex'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) MAXXTHOR TURBO consists of an organic phase with dissolved active ingredients, and an aqueous suspension phase, in which the bifenthrin is dispersed in water.

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



1

## An emulsion in water of imiprothrin with piperonyl butoxide

- ✓ An emulsion in water (EW) of finely distributed droplets of imiprothrin with piperonyl butoxide to provide super-fast knockdown and, if required, kill of pyrethroid tolerant insects.

2

## A suspension concentrate of bifenthrin particles

- ✓ A suspension concentrate (SC) of finely distributed particles of bifenthrin for long term residual performance. An even distribution ensures **MAXXTHOR TURBO** is the most complete insecticide available to Professional Pest Managers.



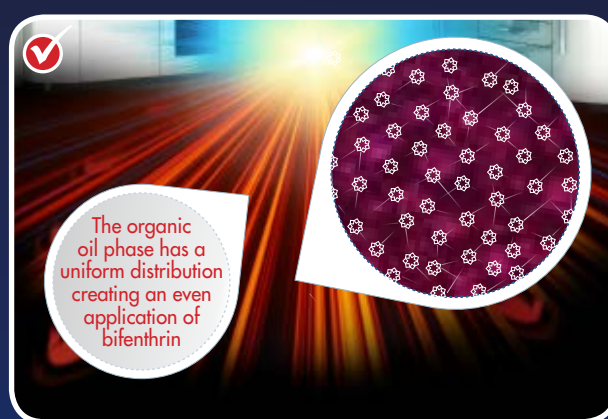
# A new concept in insecticide formulation technology creates a **suspo-emulsion of three active ingredients**, with strongly differing physical properties, in one formulation.

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

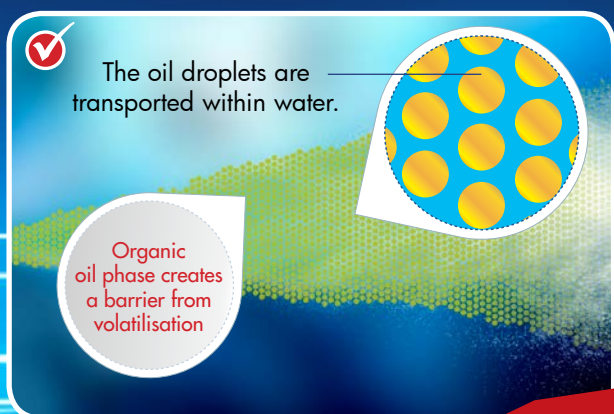
**Maximum target insect effectiveness** at time of application, through super fast knockdown with the organic phase droplets rapidly penetrating the insect cuticle.



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



**No volatilisation** of the imiprothrin and piperonyl butoxide (due their being protected by the organic oil phase) which further ensures improved knockdown.



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



**ENSYSTEX™**

LEADING INNOVATION IN PEST MANAGEMENT

**MAXXTHOR™**  
**TURBO**

TARGETED INSECTICIDE

**PHONE 13 35 36**

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### **FAO Compliant Formulation**

#### **MAXXTHOR TURBO**

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