

DOBOL[®]

PROFESSIONAL

DOBOL[®] MICROCYP

A HIGH PERFORMANCE
MICROENCAPSULATED FORMULATION



Kwizda

Biocides

SMART SOLUTIONS FOR PROFESSIONALS

DOBOL® MICROCYP

»» AN EXCLUSIVE MICROENCAPSULATED FORMULATION FOR A LONG LASTING CONTROL ON A WIDE RANGE OF INSECTS

Fast knockdown

Excellent residual action

Broad-spectrum for crawling and flying insects control

Reduces dosing frequency

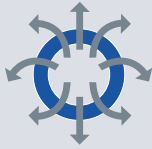
Works on a wide range of surfaces

Water-based

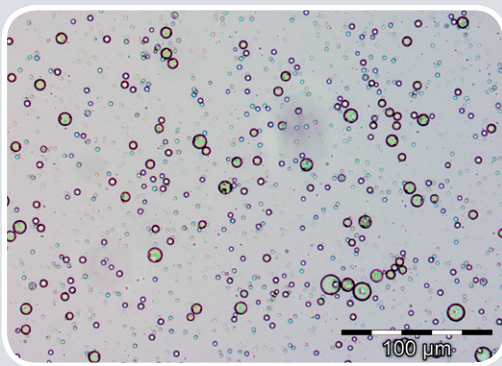
Easy dosing

Non-staining

Low odor



DOBOL® MICROCYP's microscopic photo



The treated surface is covered with millions of microcapsules. The microcapsules will be picked up by the insects moving over the treated surface: Some of the capsules will start diffusing the active ingredient through the insect cuticle. Some others will be transported by the insect to the harbourage sites.

»» A UNIQUE HIGH PERFORMANCE MICROENCAPSULATION TECHNOLOGY

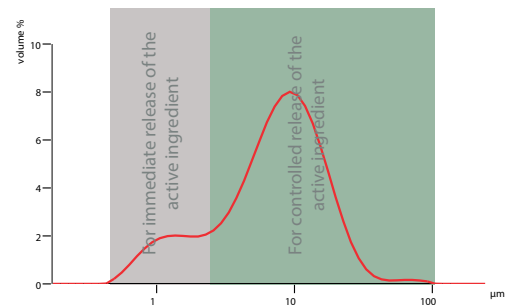
The solution of DOBOL® MICROCYP has been developed by Kwizda, a leading company in Europe in the process of microencapsulation. Kwizda has mastered this process for more than 20 years with 2 international patents.

DOBOL® MICROCYP is an advanced microencapsulation formulation in which the active ingredient, Cypermethrin is entrapped in an inert polymer coating. The inert coating acts as an outer wall to isolate the active ingredient, to protect it from environmental degradation and to control the release of the active ingredient.

»» BI-DISTRIBUTION OF DOBOL® MICROCYP PARTICLES'SIZE

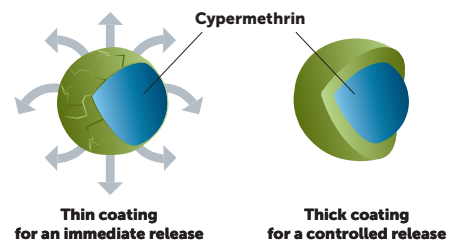
DOBOL® MICROCYP technology of the coating is unique on the market. The high technology microcapsules, impermeable to aqueous medium, become porous while drying, releasing the active ingredient. Kwizda's fully continuous encapsulation process assures a perfect homogenous formulation and a well controlled and unique bi-particle-size-distribution. The size of the particles is only coming from the thickness of the coating.

Particle size distribution



The particles with a thinner coating allow the release of a small, adequate amount of active for immediate pest control upon application.

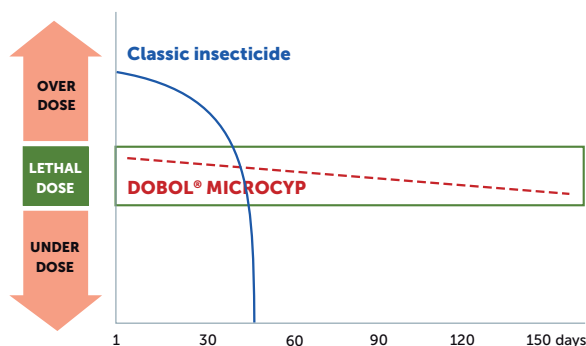
The remaining of the active is released in a steady and prolonged way up to 6 months by the particle having a thicker coating.



A HIGH PERFORMANCE MICROENCAPSULATED FORMULATION

»» DOBOL® MICROCYP BENEFITS FOR THE APPLICATOR

- It can be mixed and handled more safely as the plastic polymers coating the active ingredient helps protect the applicator from insecticide exposure.
- It reduces the volatility of the formulation, thereby diminishing losses at the application site, increasing the effectiveness.
- It reduces odor by masking them.
- It is less likely to stain or damage treated surfaces.
- It performs well on both porous and nonporous surfaces as insects readily "pick up" the microcapsules from treated surfaces.
- The controlled release of the active ingredient prolongs the effectiveness, delivering the lethal dose in a homogeneous and constant way for several months.



»» A WELL-CHOSEN ACTIVE INGREDIENT

Cypermethrin has been carefully chosen for its insecticide properties. It is a synthetic pyrethroid which emulates the properties of pyrethrum. It is designed to be effective longer than pyrethrins. Cypermethrin acts immediately once an insect has come into contact or ingests it. It interferes with the insect's nerve cells, which leads to paralysis and prevents the insect from performing normal functions like feeding.

The combination of Kwizda microencapsulation technology with cypermethrin has given birth to a powerful formulation unique on the market containing only one active ingredient to minimize any potential cocktail effect.

»» THE OUTSTANDING PERFORMANCE OF DOBOL® MICROCYP

Fast Killing and long lasting control of a wide range of crawling and flying insects. DOBOL® MICROCYP has shown efficacy on 30 different species under several application conditions.

% MORTALITY ON CRAWLING INSECTS

Common name (Latin name)	Day 0	+1 month	+3 months	+6 months
German cockroach (<i>Blattella germanica</i>), Oriental cockroach (<i>Blattella orientalis</i>), American cockroach (<i>Periplaneta americana</i>), Cat flea (<i>Ctenocephalides felis</i>) - larvea and adult, Bed Bug (<i>Cimex lectularius</i>), Spider (<i>Tegenaria domestica</i>), Tick (<i>Ixodes ricinus</i>), Dust mite (<i>Dermatophagoides pteronyssinus</i>), Dark litter beetle (<i>Alphitobius diaperinus</i>).	100%	100%	100%	100%

% MORTALITY ON FLYING INSECTS

Common name (Latin name)	Day 0	+1 month	+3 months	+6 months
Tiger mosquito (<i>Aedes albopictus</i>), Mosquitoes (<i>Aedes aegypti</i> , <i>Culex quinquefasciatus</i> , <i>Anopheles gambiae</i>), Stable fly (<i>Stomoxys calcitrans</i>), house fly (<i>Musca domestica</i>), Fabric moth (<i>Tineola bisselliella</i>).	100%	100%	100%	100%

% MORTALITY ON FOOD INSECTS

Common name (Latin name)	Day 0	+1 month	+3 months	+6 months
Flour beetle (<i>Tribolium confusum</i>), Red flour beetle (<i>Tribolium castaneum</i>), Flour moth (<i>Plodia interpunctella</i>), Food moth (<i>Ephestia kuehniella</i>), Wheat weevil (<i>Sitophilus granarius</i>), Rice weevil (<i>Sitophilus oryzae</i>), Lesser grain borer (<i>Rhizopertha dominica</i>), Sawtoothed grain beetle (<i>Oryzaephilus surinamensis</i>), Hide beetle (<i>Dermestes maculatus</i>), Drugstore beetle (<i>Stegobium paniceum</i>), Mealworm beetle (<i>Tenebrio molitor</i>), Foreign grain beetle (<i>Ahasverus advena</i>), Khapra beetle (<i>Trogoderma granarium</i>), Cigarette beetle (<i>Lasioderma serricorne</i>).	100%	100%	100%	100%

»» DOBOL® MICROCYP PRODUCT PROFILE

Target	For the control of a broad-spectrum of crawling and flying insects
User	Professionals
Active Ingredient	Cypermethrin: 90 g/L
Formulation	Capsule suspension, water based
Action mode	Release of a small adequate amount of active upon application Slow and steady release of the remaining amount of active
Biocidal effect	Within hours following the application
Residual effect	Protection up to 6 months
Instructions	Preventive ou curative treatment surface Application as a spot or as cracks and crevices treatment
Application areas	In residential, institutional, public and commercial buildings including offices, stores, factories, museums, cinemas, hospitals (in unoccupied services), ships, waste storage, farm buildings, canteens, restaurants, food manufactures)
Dosage	Dilution of 25 ml in 1 liter of water to apply on a 20 m ² to protect a surface of 100 m ² using a conventional compression sprayer equipment



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