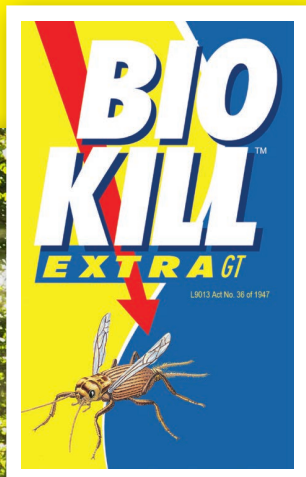




FOR CONTROL OF:

- ☒ Ants
- ☒ Bedbugs
- ☒ Cockroaches
- ☒ Fleas
- ☒ Spiders
- ☒ Ticks

BIO-DEGRADABLE
RESIDUAL ACTION
NEUTRAL ODOUR



BIO KILL® EXTRA GT

New Patented Micro-Encapsulation Technology

The emulsification, using a new tool for homogeneous distribution of the oil droplets, produces a droplet size that is the inner diameter of the micro-capsule containing an oil soluble catalyst for curing the inert surfaces of the formed wall.

The final particle size of the suspended micro-capsule is a function of the amount of wall forming material used during the process of micro-encapsulation.

The active ingredient inside of the micro-capsule contains an inert fluid that modifies the mobility and the diffusion through the pores of the capsule wall.

The active ingredient is not released as far as it is in suspension in water due to the presence of a special protective colloid that controls the osmotic pressure. Upon application and drying of the surface the active ingredient starts releasing by diffusion.



Microcapsules frozen at -70°C showing the frozen protective colloid (40.000 X electronic microscope)



Micro capsules releasing active ingredient by disruption or diffusion (1.000x enlarged) big capsules produced specially to show the release of the A.I. No example of the actual commercial product.

BIO KILL® EXTRA GT

New Patented Micro-Encapsulation Technology

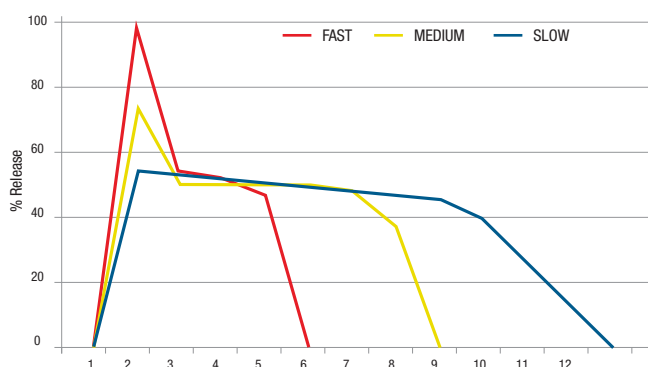
	SLOW	SLOW-MEDIUM	MEDIUM	FAST
Wall type	glycolurylurea	glycolurylurea	glycolurylurea	glycolurylurea
Wall thickness	102 nm	102 / 60 nm+	60 nm	16,5 nm
Release time	6 –8 weeks	4-6 weeks+	2-4 weeks	0,5-1 week
Residual activity*	up to 12 weeks	up to 10 weeks+	up to 8 weeks	up to 5 weeks

*Residual activity depends on environmental conditions

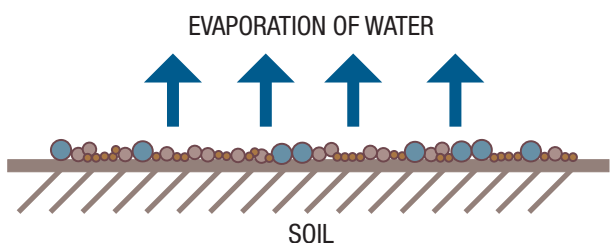
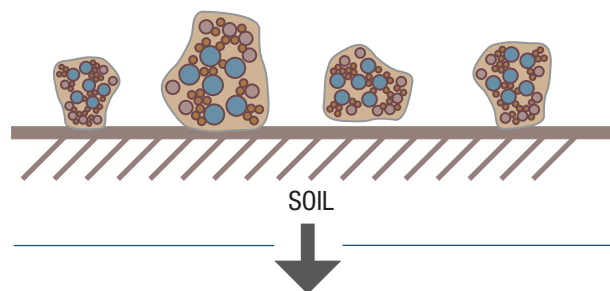
+The SLOW-MEDIUM sample is a 1:1 mixture of SLOW and MEDIUM capsules, release time and residual activity are calculated values.

Bio Kill Extra GT is a proprietary combination of the slow, medium and fast acting - allowing a very specific mode of action, with a very fast KD and excellent residual effect.

Kinetics, SLOW, MEDIUM and FAST release. The onset of activity is related to the speed of release and reverse proportional to the release time.



Exclusive micro encapsulation technology is applied to surfaces at the rate of 90,000 micro capsules per 100 square cm.



DETAIL



Micro capsulated particles of 2µm average maintain their shape longer, remaining active on different types of surfaces, even exposed to outdoor conditions.



BIO KILL® EXTRA GT

Achieves the same profile of activity with lower rates of active ingredient minimising environmental impact, but with control over 30 pest species. Approved for indoor and outdoor use on both porous and non-porous surfaces with no time gap between the onset of the activity and the release of A.I.

BIO KILL® EXTRA GT RTU composition:

Lambda Cyhalothrin (Pyrethroid) 0.68 g/ℓ

Prallethrin (Pyrethroid) 0.075 g/ℓ

As RTU in a form of a soft gel formulation concept stabilised for a long shelf life, it is the safe answer to a very effective formulation.

The new micro-encapsulation process is modified in order to obtain different particle sizes and in “consequence” different wall thickness and different release time, changing the mode of action and the residual activity.

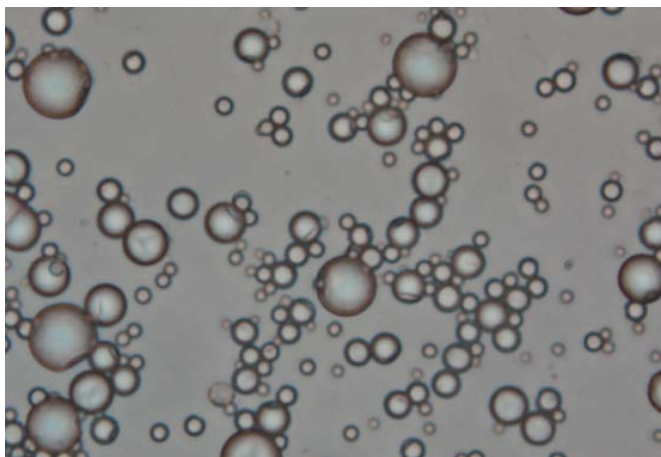
BIO KILL® EXTRA GT

Works as a fast acting insecticide (fast Knock down like an emulsion in water) with a remarkable residual activity. The porosity of the wall is maintained but the speed of action and residual is modified to tailor to the specific application.

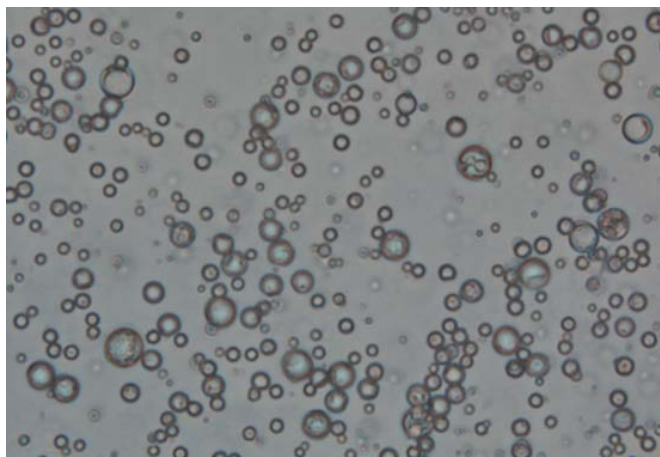


BIO KILL® EXTRA GT

New Patented Micro-Encapsulation Technology



Previous used capsules in comparison to the ones used by BKE GT



New smaller and more homogeneous capsules used for BKE GT of the latest technology.

BIO KILL® EXTRA GT TOXICOLOGY

READY –TO-USE:

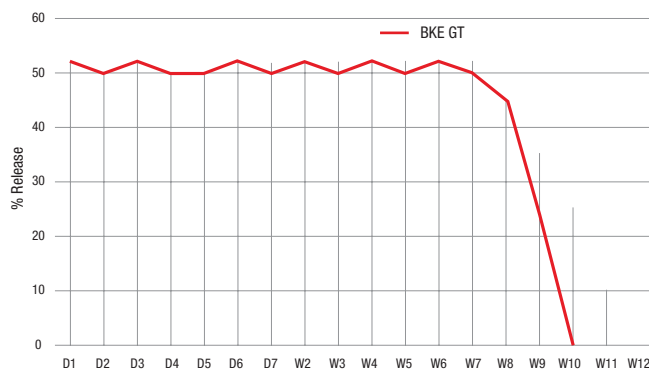
Oral LD50	>5.000 mg/kg	Rats
Dermal LD50	>5.000 mg/kg	Rats
Inhalation LC50	>5.000 mg/m3 (4h)	Rats
Eye irritation	“non-irritant”	Rabbits
Skin irritation	“non-irritant”	Rabbits
Skin irritation	“non-irritant”	Guinea Pigs

CONCENTRATE:

Oral LD50	300 –2.000 mg/kg	Rats
Dermal LD50	> 2.000 mg/kg	Rats
Inhalation LC50	> 2,5 mg/m3 (4h)	Rats
Eye irritation	“non irritant”	Rabbits
Skin irritation	“non irritant”	Rabbits
Skin irritation	“non irritant”	Guinea Pigs

KILL® EXTRA GT contains:

- Lambda Cyhalothrin micro-encapsulated as a Killing agent.
- Parallethrin as EW emulsion oil in water for KD and better film distribution.
- Protective colloid to keep the product stable/non-release for the entire shelf life.
- UV protection for improved stability upon spraying.
- Film formers to improve the residual activity for very small micro-capsules.



BK GT EXTRA releases the required killing amount of A.I. right from the beginning, staying minimal 5, but up to 11 weeks, in the required activity range to kill and control insects. At the same times it does not “contaminate” the environment. Once BK GT EXTRA does not release enough A.I. any longer it will stop activity.

NEW PATENTED MICRO-ENCAPSULATION TECHNOLOGY

FOR CONTROL OF:

- | | |
|---|---|
| ☒ Ants | ☒ Fleas |
| ☒ Bedbugs | ☒ Spiders |
| ☒ Cockroaches | ☒ Ticks |

BIO-DEGRADABLE

RESIDUAL ACTION

NEUTRAL ODOUR



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