

JESMOND

BIO KILL[®] Classic **INFORMATION DATA SHEET**

GENERAL CHARACTERISTICS

BIO KILL[®] Classic is a water based formulation with very low oral, dermal and inhalation toxicity, no skin irritation. On the others side it represents a broad insecticidal spectrum, as well as insect repellent- and miticidal activities.

BIO KILL[®] Classic therefore offers a very broad range of applications as general parasticide and hygiene insecticide in households, industrial and trade facilities, restaurants, public buildings, hospitals, zoos, and others.

EFFICACY

The active ingredient of **BIO KILL[®] Classic** shows the following relative insecticidal activity (50 % killing rate) against female house flies (*Musca domestica*), German Cockroaches (*Blattella germanica*) and mosquitoes (*Aedes aegypti*). (Relative efficacy, propoxur = 1 or DDT = 1)

	M.domestica	B.germanica	A.aegypti
BIO KILL[®] Classic a.i.	21.6 X	5.7 X	8.4 X
Fenitrothion	3.2 X	4.2 X	-
DDVP	2.0 X	-	-
DDT	1.8 X	-	1.0 X
Lindane	-	3.2 X	-
Malathion	1.0 X	-	2.9 X
Propoxur	1.0 X	1.0 X	-

The overall killing effects of **BIO KILL[®] Classic** on all surfaces was compared with untreated control surfaces and surfaces sprayed with the same volumes of an aqueous emulsion containing 0.3 % Gokilaht + 0.1 % Neopynamin forte :

Surface Material	Overall Killing Rate of B. germanica		
	BIO KILL[®] Classic	Gokilaht 0.3 Neop.forte 0.1	Control
Wall Tile	100%	99%	0%
Chip Board	100%	79%	-
Old Plastering	98%	7%	-
Fresh Concrete	98%	33%	-

Residual effects of <i>BIO KILL® Classic</i> emulsion (0.25 %) on different surface materials. (Percent kill of <i>B. germanica</i> in relation to ageing of the spray layer) :										
Surface Material	Application Rates		TIME AFTER ADMINISTRATION OF PRODUCT							
	ml/m ²	mg/m ²	1 day	1	2	3	4	5	6	8 weeks
Wall tile	50	125,00	100	100	100	100	100	100	100	100 % kill
Chip Board	75	187,50	100	100	100	100	100	100	100	100 % kill
Plastering	100	250,00	100	100	100	100	100	100	100	100 % kill
Fresh Concrete	100	250,00	100	100	100	100	100	100	100	100 % kill

BIO KILL® Classic does not stain and has a very low vapor pressure. It can efficiently be used in textile protection and wood preservation. Though *BIO KILL® Classic* is easily degradable in contact with living matter, it may be very persistent on non-organic surfaces. Thus, it has good residual effects and cannot accumulate in the food chain nor the environment.

Because of this unique combination of safety, efficacy and high yield, this high quality product is highly competitive despite its elevated price level in relation to common one purpose insecticides.

ACUTE TOXICITY DATA

	EMULSION 0,25 %
Acute, oral, rat	not measurable
Acute, dermal, rat	not measurable
Acute, inhalation, rat	not measurable
Primary skin irritation, rabbit	-
Primary eye irritation, rabbit	-
SPECIAL INVESTIGATIONS	
Skin irritation, human	no irritation (24h)
Repeated Wetting, dog	no toxic effects
Repeated Wetting, hen	no toxic effects
Swimming Test, rats	no toxic effects

Chronic Toxicity

Many tests and studies with the active ingredient have shown low oral toxicity on chronic exposure, non-mutagenicity, non-teratogenicity, and non-carcinogenicity in appropriate and recognized animal models. Due to its negligible vapor pressure (10⁻⁹ kPa) the active ingredient of *BIO KILL® Classic* does not pose any long-term exposure problem after in-door applications.

Human Exposure

Long-term use without special security or safety measures has not revealed any inhalation or skin effects, nor other adverse effects in applicators. *BIO KILL® Classic* has been used as a skin spray under tropic climate to repel flies transmitting severe eye and skin diseases and infections, thus helped to eradicate spread of these diseases.