



# OKADA ECOTECH PTE LTD (REG NO 199805584M)

24 Pioneer Crescent, #04-08,  
West Park Bizcentral, Singapore 628557.  
Tel.: (65) 6872 3515 Fax: (65) 6872 6558  
Website: www.okada-ecotech.com

## MATERIAL SAFETY DATA SHEET

### SECTION I: PRODUCT IDENTIFICATION

Product Name **BIO-X® Q'BUG**  
Active Ingredient Etofenprox (technical)  
Chemical Name 2-(4-ethoxyphenyl)-2-methylpropyl-3-phenoxybenzyl ether  
Chemical Formula Aryl-propyl benzyl ether

### SECTION II: COMPOSITION

<u>Component</u>	<u>%w/w</u>
Etofenprox	1.10
Inert Ingredients	98.90

### SECTION III: HAZARDS IDENTIFICATIONS

Skin contact non-irritating (Rabbit)  
Eye contact non-irritating (Rabbit)  
Skin sensitization Not a sensitizer (Guinea Pig)  
Carcinogenicity Not likely to be carcinogenic to humans

### SECTION IV: EMERGENCY & FIRST AID PROCEDURE

Eye Contact: Flush eye immediately with steady running water for at least 15 mins  
Skin Contact: Immediately wash with soap & water  
Inhalation: Remove victims from area of exposure and move to fresh air  
Ingestion: Drink plenty of water. Do not induce vomiting

NOTE TO PHYSICIAN  
Treat symptomatically

### SECTION V: FIRE & EXPLOSION HAZARD DATA

Flash point: Not applicable (non-flammable)  
Extinguishing Media: Not applicable  
Special Fire Fighting Procedure: Not applicable  
Unusual Fire & Explosion Hazards: Not applicable

## **SECTION VI: SPILL OR LEAKAGE**

STEP TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED.  
Hose off road surfaces to prevent accident or slippery surface.

## **SECTION VII: HANDLING & STORAGE**

Keep out of reach of children. Keep container closed when not in use.  
Store in a cool, dry place, away from direct sunlight and high temperature.

## **SECTION VIII: SPECIAL PROTECTION INFORMATION**

Ventilation Requirements: General ventilation is adequate  
Respiratory Protection: None normally required  
Protective Gloves: None normally required  
Eye Protection: None normally required

## **SECTION IX: PHYSICAL /CHEMICAL CHARACTERISTIC**

Appearance: Milky white aqueous emulsion  
Odor: Pleasant  
pH at 25 deg C:  $7.0 \pm 1.0$   
Dispersibility in water: Completely dispersible  
Viscosity (BF/LVT/#1/100rpm/30deg C): 4-6 cps  
Specific Gravity:  $1.0 \pm 0.05$

## **SECTION X: STABILITY & REACTIVITY DATA**

Stability: Stable  
Hazardous Decomposition Products: Oxides of carbon. Decomposition is very unlikely.  
Hazardous Polymerization: Will not occur  
Materials to Avoid: Acids  
Conditions to Avoid: Excessive heat & prolong sunshine

## **SECTION XI: TOXICOLOGICAL INFORMATION**

Acute Toxicity:  
Ingestion LD<sub>50</sub> > 2,000mg/kg (OECD 420)  
Inhalation LC<sub>50</sub> > 5,900mg/m<sup>3</sup> air  
Dermal Absorption LD<sub>50</sub> > 2,000mg/kg (OECD 402)

## **SECTION XII: ECOLOGICAL INFORMATION**

### Wildlife & Fish

(a) Mallard Duck LD<sub>50</sub> (oral) >2,000mg/kg

(b) Aquatic Animals

Species	TL <sub>m</sub> value (ug/L, 48 hrs)
Carp	> 5,000
Goldfish	> 1,730
Ayu Fish	> 1,200
Water Flea	>40,000 (3hrs)
Short-necked Clam	>490,000

## **SECTION XIII: WASTE DISPOSAL METHOD**

### WASTE DISPOSAL METHOD

Collect and dispose in sewage system if local authorities permit.

## **SECTION XIV: TRANSPORTATION INFORMATION**

SHIPPING INFORMATION: D.O.T. Not Regulated

## **SECTION XV: NATIONAL REGULATION AND REFERENCE**

Not Applicable

## **SECTION XVI: OTHER INFORMATION**

For Household Use