



OKADA ECOTECH PTE LTD (REG NO 199805584M)

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MATERIAL SAFETY DATA SHEET

SECTION I: PRODUCT IDENTIFICATION

Product Name **BIO-X® 3-IN-1 HANDSPRAY**
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	1.25
Inert Ingredients	98.75

SECTION III: HAZARD IDENTIFICATIONS

Skin contact: Non-irritating (Rabbit)
Eye contact: Non-irritating (Rabbit)
Skin sensitization: Non 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 Procedures:	Not applicable
Unusual Fire & Explosion Hazards:	Not applicable

SECTION VI: SPILL OR LEAKAGE

STEP TO BE TAKE 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: 6.5 ± 1.0
Dispersibility in water: Completely dispersible
Viscosity (BF/LVT/#1/100rpm/30deg C): 2-6 cps
Specific Gravity: 1.0 ± 0.10

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: $LD_{50} > 2,000\text{mg/kg}$ (OECD 420)
Inhalation: $LC_{50} > 5,900\text{mg/m}^3$ air
Dermal Absorption: $LD_{50} > 2,000\text{mg/kg}$ (OECD 402)

SECTION XII: ECOLOGICAL INFORMATION

Wildlife & Fish

(a) Mallard Duck LD₅₀ (oral) >2,000mg/kg

(b) Aquatic Animals

Species	TL _m 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: TRANSPORTION INFORMATION

Shipping Information: D.O.T. Not Regulated

SECTION XV: NATIONAL REGULATION AND REFERENCE

Registered with National Environment Agency, Singapore under The Control of Vectors and Pesticides Act (Chapter 59)

Registration Number: SINNEAI-WtrAE/003/0586

SECTION XVI: OTHER INFORMATION

For Household Use