



# OKADA ECOTECH PTE LTD (REG NO. 199805584M)

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## MATERIAL SAFETY DATA SHEET

### SECTION I: PRODUCT IDENTIFICATION

Product Name: **BIO-X® i-SHIELD & BIO-X® Lv SHIELD**  
Active Ingredient: Botanical Extracts

### SECTION II: COMPOSITION

<u>Component</u>	<u>%w/w</u>
Botanical Extracts	15.00
Emulsifiers	4.60
Other Inert Ingredients	80.40

### SECTION III: HAZARD IDENTIFICATIONS

Skin contact: non irritating (Rabbit)  
Eye contact: non irritating (Rabbit)  
Skin sensitization: non sensitizing (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
Extinguishing Media:	Not applicable
Special Fire Fighting Procedure:	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 Liquid
Odor:	Pleasant Pine odor
pH at 30 deg C:	4 – 6
Dispersibility in water:	Completely soluble in water
Viscosity (BF/LVT/#1/100rpm/30deg C):	3 - 7 cps
Specific Gravity:	1.00 ± 0.1

## **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 Guideline)

Inhalation LD<sub>50</sub> > 2.11mg/l air

Dermal Absorption LD<sub>50</sub> > 2,000mg/kg (OECD 434 Guideline)

## **SECTION XII: ECOLOGICAL INFORMATION**

- |   |                                      |
|---|--------------------------------------|
| 1) Effect on Earthworm (LC50):                  | >1000mg/kg-safe                      |
| 2) Effect on predators:                         | Harmless                             |
| 3) Hazard to soil Microflora:                   | Non hazardous                        |
| 4) Acute Daphnia Immobilisation Test (EC 50):   | >1000mg/ltr-safe                     |
| NOEL:   | 197.5 mg/ltr                         |
| 5) Acute toxicity to fish-Rainbow Trout (LC50): | 440mg/ltr(24hrs)<br>150mg/ltr(96hrs) |
| NOEC:   | 50mg/ltr                             |
| 6) Algal Inhibition Test:                       | Non inhibitory/Non Stimulant         |
| NOEC:   | 22mg/ltr                             |
| 7) Metabolism in soil:                          | Rapid Decomposition in soil          |
| 8) Degradability in water:                      | Readily Biodegradable in water       |

## **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 REGULATIONS AND REFERENCES**

None

## **SECTION XVI: OTHER INFORMATION**

None