



OKADA ECOTECH PTE LTD (REG NO. 199805584M)

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MATERIAL SAFETY DATA SHEET

SECTION I: PRODUCT IDENTIFICATION

Product Name: **BIO-X® 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 LD₅₀ > 2,000mg/kg (OECD 420 Guideline)

Inhalation LD₅₀ > 2.11mg/l air

Dermal Absorption LD₅₀ > 2,000mg/kg (OECD 434 Guideline)

SECTION XII: ECOLOGICAL INFORMATION

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|---|--------------------------------------|
| 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)
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