



OKADA ECOTECH PTE LTD (REG NO 199805584M)

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MATERIAL SAFETY DATA SHEET

Date: 19/03/11

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 Not a sensitizer (Guinea pig)
Carcinogenicty 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

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SECTION V: FIRE & EXPLOSION HAZARD DATA

Flash point : >80 deg C
Extinguishing Media : Carbon dioxide, polymer foam. Dry chemical powder
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 : 3.5– 5.5
Dispersibility in water : Completely soluble in water
Viscosity (BF/LVT/#1/100rpm/30deg C) : 2 - 5 cps
Specific Gravity : 0.995 ± 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

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SECTION XI: TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingestion LD₅₀ > 2,000mg/kg (OECD 420 Guideline)

Inhalation LD₅₀ > 4.11mg/l air

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

SECTION XII: ECOLOGICAL INFORMATION

- | | |
|-----------------------------------|----------------------------------|
| 1) Effect on Honey Bees | - Harmless |
| 2) Effect on Earthworm(LC50) | - >1000mg/kg-safe |
| 3) Effect on predators | - Harmless |
| 4) Hazard to soil Microflora | - Non hazardous |
| 5) Acute Daphnia Immobilisation | |
| Test(EC 50) | ->1000mg/ltr-safe |
| NOEL | -197.5 mg/ltr |
| 6) Acute toxicity to fish-Rainbow | |
| Trout(LC50) | -440mg/ltr(24hrs) |
| | -150mg/ltr(96hrs) |
| | -50mg/ltr |
| 7) Algal Inhibition Test | - Non inhibitory/Non Stimulant |
| NOEC | - 22mg/ltr |
| 8) Metabolism in soil | - Rapid Decomposition in soil |
| 9) 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