PRODUCT SAFETY DATA SHEET

Product Name: PLANT SOAP PS1

Date of issue 27/06/2008

IDENTIFICATION OF PRODUCT, COMPANY AND COMPOSITION

Statement of Hazardous Nature : Hazardous substance causing serious eye damage and causes irritation to skin. Xi, R38, R41

Supplier : Chemtest Laboratories Ltd, P.O. Box 73 Drury 2247, Auckand, New Zealand

Use and type: Surfactant of vegetable origin		
Properties		
Appearance : Light amber turbid liquid, no distinguishing odour.		pH value (20% conc) 11.5 –12.5
Density : 1.1g/ml		
Flash Point : >100 deg.C		
Ingredients		
Chemical name	Code	Amount
Alkylpolyglycoside C10-16	110615-47-9	20-30%
Alkyl polyglycoside	68515-73-1	30-50%

HEALTH HAZARD INFORMATION

Health Effects

Swallowed : May be harmful if swallowed. Eyes : Risk of serious damage. Skin : Irritant

First Aid

Swallowed : Rinse the mouth. Drink 1-2 glasses of water Eyes : Rinse immediately minimum 15 minutes, seek medical advice. Inhaled : Not relevant Skin : Rinse with running water

First Aid Facilities

An eye wash fountain and safety shower.

PRECAUTIONS FOR USE

Engineering Controls : Stable at normal conditions. Ensure access to safety shower and eye bath. Personal Protection : Wear tightly fitting safety goggles and protective gloves and clothing. Materials to avoid: Strong oxidising agents.

SAFE HANDLING INFORMATION

Storage and Transport : Keep container tightly closed < +40 deg Celsius. Not dangerous goods according to IMDG, IATA and ASCC. No approved handler required. No tracking required. Spills and Disposal : Treat waste as from organic chemical processes, detergents, disinfectants and cosmetics.

Fire/Explosion Hazard : Avoid open flames.

Dangerous decomposition products: No decomposition if used according to specifications.

OTHER INFORMATION

Incompatible Substances : None if used for intended purpose. Emergency Telephone Number : 0800 POISON / 0800 76 47 66 Location of additional information :58 Sir William Avenue, East Tamaki, Auckland

Contact point: Chemtest Laboratories Ltd, Technical Manager Phone 09 2946 297 / Mobile 0274 930 199

PS1 Plant Soap from McHort

PS1 is NOT a registered pesticide.

It has not undergone independent or regulatory body efficacy or toxicity trials. Use at this time is experimental and entirely at the users risk.

The concept:

To produce a product that may suppress or dissuade certain plant pest activity, reduce or eliminate the risk of phytotoxicity and remain compatible with an integrated pest management programme.

Many chemical theraputants require us the have a withholding period between last application and the introduction of predators or parasites.

The mode of action:

Simply, the high viscosity plant extract when diluted in water and sprayed onto plant leaves and stems infested with crawling insects covers and smoothers them. The most likely effected plant pests would be those that breath through their exoskeletons and are less rather than more mobile. Whilst we make no claims as to controlling any or specific pests those that are less mobile include Scale, Mealy bug, Whitefly egg stage, Spider mite juveniles, Leafhopper, Thrips and Aphids.

The advantages :

This methodology offers virtually no residual effect on the plant and little if any effect on highly mobile pollinating insects.

The material cost is modest and insects are unlikely to develop resistance . Being a plant extract the likelihood of toxicity to either mammals or the environment is considered to be very low. Plant Soap act as a surfactant and once applied reduces surface tension of water droplets on foliage. This drier foliage surface is less hospitable to the establishment of fungal pathogens.

The disadvantages :

This is not the most efficient "Knock down" quick cure treatment.

The material may be washed off the insects it lands on before they have suffocated. Some insects may even be able, through preening, to remove the covering of PS1 before suffocating.

The product and it's mode of action is less suited to cropping situations were frequent overhead irrigation is use.

General hints and tips when using PS1 Plant Soap.

Apply as a high volume spray, to run-off @1-3ml per litre to both sides of the leaves. Do not spray under high light intensity or rapid drying conditions.

Trial on each plant species on a modest scale to check for safety.

Ensure that the longest interval possible between application and either rainfall or overhead irrigation can be achieved.. Several hours and even several days would be expected to achieve the best results.

Check compatibility before tank mixing with fungicides first before large scale use. Repeat application will most certainly be better than isolated use infrequently. Use at 5-7 day intervals.

Continue to monitor pest populations carefully and if you feel the infestation is out of control resort to considered chemical pesticide use.