

MATERIAL SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identification

Product name: Pineye	Chemicals name: di-1-p-menthene
CAS-No.: 34363-01-4	EINECS No.: N/A

Synonyms: Pinolene; Piney Resin Emulsion

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses:
Pineye is designed to hold pesticides on crop foliage, to enable the pesticide to be more effective for a longer period of time.

1.3 Details of the supplier

- Supplier: Foreverest Resources (Xiamen) Ltd.
- Tel: +86-592-5092299
- Fax: +86-592-5151667

1.4 Emergency telephone number

+86 -532-83889090(CHINA)

1.5 General information

Pineye is a non-toxic biodegradable monoterpene polymer, used for coating plants to prevent loss of water and adhere pesticides to the plants. Using Pineye™ will forms a prophylactic shield on plants, against UV degradation, frost, windburn and acid rain, to aid plant growth.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Not classified as hazardous according to criteria of ASCC.
Not classified as a Dangerous Good according to the ADG Code

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Substance	Proportion
di-1-p-menthene	904 g/L
Other ingredients determined not to be hazardous	Balance

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Skin contact	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with soap and water.
Eye contact	If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor if irritation occurs and persists.

Inhalation	Remove to fresh air
Ingestion	If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126.
Advice to Doctor	Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

This product is a COMBUSTIBLE LIQUID (flash point > 200°C).
Extinguish fire using carbon dioxide, foam, dry agent or water fog or water spray. Contain all runoff.

5.2 Hazards from combustion products

Combustible liquid (C2). Can emit toxic fumes when burned.

5.3. Precautions for fire-fighters and special protective equipment

Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self contained breathing apparatus. Do not breathe smoke or vapours generated.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Emergence procedures / Material and methods for containment and cleanup procedures:

For good hygiene practices, wear protective equipment to prevent skin contamination. In the case of spillage, contain and absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste as indicated below or according to the Australian Standard 2507-1998 - Storage and Handling of Agricultural and Veterinary Chemicals.

Notification Procedures

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

No smoking, eating or drinking should be allowed where material is used or stored. This product is a C2 Combustible liquid – refer to AS 1940-2004 (amdt 2) The Storage and Handling of Flammable and Combustible Liquids for more information on the storage and handling of combustible liquids. Wash hands after use.

7.2 Conditions for safe storage

Not classified as a Dangerous Good. This product is a not a schedule poison. Store in the closed, original container in a well ventilated area away from children. Do not store for prolonged periods in direct sunlight. Do not re-use container for any purpose.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Guidelines

No exposure limits have been established for this product by ASCC.

8.2 Biological Limit Values

No biological limit allocated.

8.3 Engineering controls:

Use in ventilated areas. Keep containers closed when not in use. No special engineering controls are required for normal use.

8.4 Personal Protective equipment (PPE)

Skin protection	Use normal hygiene practises when opening the container and using the product, by wearing cotton overalls and rubber gloves. Wash before smoking, eating or using toilet facilities. Wash hands after use.
Respiratory Protection	Generally not required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Odor	Acid Value mgKOH/g
Amber coloured liquid.	Terpene odour.	N/A
Freezing point	Boiling Point	Flash Point
N/A	N/A	> 200°C.
Refractive Index N20/4	Flammability (solid, gas)	Flammability Limits (%)
N/A	Combustible liquid (C2).	Not established.
Explosion limit	Poisons Schedule:	Vapor pressure
N/A	Not a scheduled poison.	N/A
Vapor density (air=1)	Specific Gravity	Spontaneous combustability
N/A	0.96 @ 20°C.	N/A
Solubility(ies) in Water:	Not soluble - forms an emulsion.	

SECTION 10: STABILITY AND REACTIVITY

10.1 Chemical Stability

Product is considered stable.

10.2 Conditions to avoid

Avoid exposure to heat.

10.3 Incompatible materials

Can react with oxidising agents and acid catalysts.

10.4 Hazardous Decomposition Products

If involved in a fire, it may emit fumes containing toxic compounds.

10.5 Hazardous Reactions

No special considerations.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Potential Health Effects

Skin contact	Low toxicity. Acute dermal LD50 > 16,000 mg/kg. Generally not irritating, may cause very mild irritation in sensitive people.
Eye contact	Not irritating.
Inhalation	Low toxicity. Acute inhalation LD50 > 2.46 mg/L/4 hour (highest concentration attainable, no deaths recorded).
Swallowed	Low toxicity. Acute oral LD50 > 16,000 mg/kg.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Environmental Toxicology

Essentially non toxic to bees (48hour LC50 > 200 µg/bee) and earthworms (14 day LC50 > 1000 ppm).

12.2 Environmental Fate

di-1-p-menthene, the active ingredient in this product is degraded in soils by micro organisms in approximately 15 days. However, it is not readily degradable in water and is partly soluble in water. It may cause long term adverse effects in aquatic environments. It has no inhibitory effects to sewage micro organisms.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Spills and Disposal	Persons involved in cleanup and disposal should use normal hygiene practises - see section 8. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities.
Disposal of empty containers	Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

SECTION 14: TRANSPORT INFORMATION

This product is not classified as a Dangerous Good. Product is a combustible liquid (C2).

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

SECTION 15: REGULATORY INFORMATION

- Under the Standard for Uniform Scheduling of Drugs and Poisons (SUSDP), this product is not a scheduled poison.
- This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994.
- Product Registration No. 61397.
- This product is not classified as a Hazardous Substance under the criteria of ASCC.
- This product is not classified as a Dangerous Good under the Australian Code for the
- Transport of Dangerous Goods by Road and Rail.

SECTION 16: OTHER INFORMATION

16.1 Key to abbreviations and acronyms used in this MSDS:

ADG Code	Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).
ASCC	Australian Safety & Compensation Council [formally known as the National Occupational Health & Safety Commission (NOHSC)].
NOHSC	National Occupational Health and Safety Commission.
PPE	Personal protective equipment.

16. References

“Search Hazardous Substances”. Australian Safety and Compensation Council website. (2008).

“Approved Criteria for Classifying Hazardous Substances” 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.

16.1 Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

16.2 Issue Date

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