Section 1: Identification of the Material and Supplier

Product Name: **Pine 68**

Other Names: Aqueous surfactant mixture.

Proper shipping name (ADG Code): None assigned.

Recommended use: As a cleaner and disinfectant for toilets and floors.
Use as directed on the product label.

Supplier: **Hunters Products (TAS) Pty. Ltd.,**
A.C.N. 004 601 263

HEAD OFFICE	**HOBART OFFICE**	**BURNIE OFFICE**
60 Gleadow Street,	105 Albert Road,	22 Pearl Street,
INVERMAY TAS 7248	MOONAH TAS 7009	WIVENHOE TAS 7320
Tel: 03 6331 4755	Tel: 03 6228 7955	Tel: 03 6431 9627
Fax: 03 6334 1065	Fax: 03 6228 7988	Fax: 03 6432 2083

Emergency Phone Numbers:

Transport/Fire Emergency:	**000**	(Emergency services)
Medical Emergency:	**131126**	(Poisons Information Centre)

Section 2: Hazards Identification

Not classified as hazardous according to criteria of Worksafe Australia.

Non-dangerous goods.

Risk Phrases: None.

Safety Phrases: None.

Section 3: Composition/Information on Ingredients

Ingredients:

Pine oil	[8002-09-3]	< 10 %
Surfactant		< 10 %
Triethanolamine	[102-71-6]	< 10 %
Other ingredients deemed not to be hazardous		< 10 %
Water	[7732-18-5]	to 100 %

Section 4: First Aid Measures

For advice, contact a Poisons Information Centre (Phone 131126) or a doctor.

Swallowed: If swallowed, do NOT induce vomiting.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Eyes: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Inhaled: Remove from exposure, rest and keep warm. Seek medical advice.

First Aid facilities:
Recommended: Eye wash. Hand wash basin.

Advice to Doctor:
Product is an aqueous solution containing low proportions of pine oil, triethanolamine and a surfactant. May be irritating to skin and eyes. If swallowed, vomiting should not have been induced because of risk of aspiration of froth into the lungs. May be a sensitiser for some individuals. Contact Poisons Information Centre.

Aggravated medical conditions:
Pre-existing skin disorders.
Prior sensitisation to either pine oil or triethanolamine.

Section 5: Fire Fighting Measures

HAZCHEM Code: None assigned.

Evacuate: No.

Extinguishant: Water.

Risk of violent reaction or explosion: No.

Products of combustion: Water vapour, oxides of carbon, oxides of nitrogen.

Protective Equipment: Breathing apparatus and protective gloves for fire only.

Section 6: Accidental Release Measures

Emergency Procedures:
Contain.
Increase ventilation.

For large spills:
Contain spillages with sand or earth. Transfer both liquid and solids to suitable container(s). Treat residues as for small spills.

For small spills:
If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise, absorb on inert absorbent and transfer to suitable closed container. Wash site of spillage thoroughly with water and detergent. Ventilate area to dispel any residual vapours.

Section 7: Handling and Storage

Precautions for safe handling:
Avoid contact with skin and eyes.
Avoid breathing aerosols.

Conditions for safe storage:
Store in a cool, well ventilated place, out of reach of children. Large quantities should be stored in a bunded area. Store in original container. Keep container tightly closed and out of direct sunlight. Keep away from acids, oxidising agents. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

Incompatibles:
Acids, oxidising agents.

Section 8: Exposure Controls/Personal Protection

National Exposure Standards:

ES-TWA:	Triethanolamine	5 mg/m³	
ES-STEL:	None assigned by NOHSC, but see:		
	Triethanolamine	10 mg/m³	[Sweden]
ES-PEAK:	None assigned.		
Notations:	Triethanolamine	Sens.	

[Sens] indicates that this material is a known sensitiser and may cause a specific immune response in some individuals.

Biological Limit Values: No data found.

Engineering Controls:

Ensure adequate ventilation (same as outdoors) when using. If handling industrial quantities, or if vapour/aerosol risk exists, consider local mechanical exhaust/extraction to keep airborne contamination as low as possible and at least below the TLV.

Personal Protective Equipment:

Avoid contact with skin and eyes. Avoid breathing vapours or aerosols. Personal protection to be selected from those recommended below, as appropriate to mode of use, quantity handled and degree of hazard:-

Normal Use:

Eye/face protection
Gloves, rubber or plastic.

Industrial Quantities:

Face shield or safety glasses
Gloves, rubber or plastic
Plastic apron, sleeves and boots
Impervious overalls.

Section 9: Physical and Chemical Properties

Appearance:	Clear, brown, mobile, frothing liquid.
Odour:	Smell of pine.
pH:	Alkaline.
Vapour Pressure:	No data.
Vapour Density:	5.1 - 5.3 (Air = 1)
Boiling Point:	From 100 °C
Melting Point:	No data.
Volatiles:	> 85 %
Volatile Organic Compounds (VOC):	> 5 % [pine oil]
Evaporation Rate:	No data.
Solubilities:	Miscible with water in all proportions.
Specific Gravity/Density:	About 1 g/mL @ 20 °C
Flash Point:	None.
Flammable Limits:	No data.
Dust Explosion:	Not applicable.
Auto-ignition Temperature:	No data.

Other Information:

Alkaline mixture. May react with acids. May react with strong oxidising agents. May darken on exposure to light and air. Very slippery when spilled.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Incompatible materials, light, air.

Incompatible Materials: Acids, oxidising agents.

Hazardous Decomposition Products: Oxides of nitrogen.

Hazardous Reactions: None known.

Section 11: Toxicological Information

Health Effects:
No data available for the mixture. Information presented relates to individual ingredients.

Acute:

Swallowed: Likely to cause gastric upset, nausea, vomiting and diarrhoea.
An aspiration risk.

Skin: May be irritating to the skin.
Will have a degreasing effect on the skin.

Eyes: Irritating to eyes. May cause itching, redness and pain.

Inhaled: Inhalation of concentrated vapours or aerosols may cause irritation of the mucous membranes, dizziness, difficulty breathing, coughing and wheezing.
Aspiration of froth into the lungs during swallowing or vomiting may cause chemical pneumonitis (irritation of lung tissues) and pulmonary oedema (fluid build-up in the lungs). Onset of symptoms may be delayed.

Chronic: Repeated skin contact may cause irritation and dermatitic effects. Repeated inhalation exposure, or skin contact, may lead to sensitisation and allergy in some individuals.

Triethanolamine is listed as a sensitiser, and pine oil has also been reported to have caused allergy in some individual cases.

Triethanolamine has been classified by IARC as Group 3; unclassifiable as to carcinogenicity to humans (inadequate evidence in humans: inadequate evidence in animals). **(1)**

Triethanolamine has been classified as an equivocal tumorigenic agent by RTECS criteria. **(2)(3)**

LD_{50} :

Pine oil	3,200 mg/kg oral, rat. 5,000 mg/kg skin, rabbit.
Surfactant	No data found.
Triethanolamine	4,920 µL/kg oral, rat. > 20,000 µL/kg skin, rabbit.

Section 12: Ecological Information

Ecotoxicity: Harmful to aquatic organisms.

Persistence and degradability: No data.

Mobility: Readily transported by water.

Environmental Fate: No data.

Bioaccumulative potential: No data.

Other adverse environmental effects: Contains surfactant. Local concentrations may be harmful to aquatic organisms, including fish. Pine oil may be harmful to plants.

Section 13: Disposal Considerations

The generator of any wastes from this product is responsible for its proper classification, transport and disposal.

Consult appropriate local and State regulations.

Disposal methods and containers:
Avoid disposal to natural waters or the environment.

Special precautions for landfill or incineration:
Unsuitable for incineration.
May be unsuitable for some landfill sites.

Section 14: Transport Information

UN Number: None assigned.

UN Proper shipping name: None assigned.

Class and subsidiary risk: None assigned.

Packaging group: None assigned.

Special precautions for user: Contain spillages.

HAZCHEM Code: None assigned.

Material for export: Not regulated.

Section 15: Regulatory Information

Poisons (SUSDP): Not a scheduled poison.

Dangerous Goods: No.

Carcinogen:	**Australia**	**IARC**	**NTP**	**RTECS**
	No.	Yes. **(1)**	Yes. **(2)**	Yes. **(2)(3)**

Agricultural and Veterinary Chemicals Act: Not applicable.

Australian Inventory of Chemical Substances (AICS): Listed.

Other National/International Regulations: No data.

Section 16: Other information

Date of MSDS update: September 2007
Complete review and re-write of all sections.

Abbreviations:
NOHSC - National Occupational Health and Safety Commission.
ACGIH - American Conference of Governmental Industrial Hygienists.
MAK - Maximum workplace concentration - Germany, (*maximale Arbeitsplatzkonzentration*)
IARC - International Agency for Research on Cancer (France).
NPT - National Toxicology Program (USA).
RTECS - Registry of Toxic Effects of Chemical Substances.

Literature references:

(1) *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. v.77, p.381, 2000.*

(2) *National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) NTP-TR-449, 1999.*

(3) *National Technical Information Service. (Springfield, VA 22161) PB2000-102846.*

Other Available Sources of Data:
National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [2011(2003)] - NOHSC.
Australian Dangerous Goods Code.
Standard for the Uniform Scheduling of Drugs and Poisons - AHMAC.
Exposure Standards for Atmospheric Contaminants in the Occupational Environment [1003]- NOHSC.
List of Designated Hazardous Substances [10005] - NOHSC.
Merck Index - Merck Inc.
Sax's Dangerous Properties of Industrial Materials - Lewis.
Handbook of Toxic and Hazardous Chemicals and Carcinogens - Sittig.
Handbook of Reactive Chemical Hazards - Bretherick.
Hawley's Condensed Chemical Dictionary - Wiley Interscience.
AUSREG's Chemical Data Package for PCs - AUSREG Consultancy.