



Section 1: Identification of the Material and Supplier

Product Name: Odour End

Other Names: Mixed surfactants in solvent solution.

Proper shipping name (ADG Code): Flammable liquid, n.o.s.
(d-limonene, acetone)

Recommended use: For use in grease traps and for cleaning greasy floors. Use as directed on the product label.

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

HEAD OFFICE

60 Gleadow Street,
INVERMAY TAS 7248
Tel: 03 6331 4755
Fax: 03 6334 1065

HOBART OFFICE

105 Albert Road,
MOONAH TAS 7009
Tel: 03 6228 7955
Fax: 03 6228 7988

BURNIE OFFICE

22 Pearl Street,
WIVENHOE TAS 7320
Tel: 03 6431 9627
Fax: 03 6432 2083

Emergency Phone Numbers:

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

Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia.

Dangerous goods.

Risk Phrases:	R: 11 R: 36/38 R: 43 R: 51/53 R: 65 R: 67	Highly flammable. Irritating to eyes and skin. May cause sensitisation by skin contact. Toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment. Harmful: may cause lung damage if swallowed. Vapours may cause drowsiness and dizziness.
Safety Phrases:	S: 2 S: 9 S: 16 S: 24	Keep out of the reach of children. Keep container in a well ventilated place. Keep away from sources of ignition - No smoking. Avoid contact with skin.

- S: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S: 37 Wear suitable gloves.
- S: 60 This material and its container must be disposed of as hazardous waste.
- S: 61 Avoid release to the environment. Refer to special instructions / Material Safety Data Sheets.

Section 3: Composition/Information on Ingredients

Ingredients:

d-Limonene	[5989-27-5]	30 - 60 %
Acetone	[67-64-1]	10 - 30 %
Kerosene	[8008-20-6]	10 - 30 %
Mixed surfactants	proprietary	< 10 %
Other ingredients deemed not to be hazardous		< 10 %

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 a dilute solution of surfactants in mixed solvents, containing a high proportion of d-limonene and moderate proportions of acetone and kerosene. Irritating to skin and eyes. Vapours may cause drowsiness and dizziness. May cause sensitisation by skin contact. An aspiration risk. Recovery from overdoses of d-limonene may be complicated by anuria, pulmonary oedema and bronchial pneumonia. Contact Poisons Information Centre.

Aggravated medical conditions:

Prior sensitisation to d-limonene. Liver or kidney dysfunction. Use of alcoholic beverages will enhance harmful effects.

Section 5: Fire Fighting Measures

HAZCHEM Code:	3[Y]E
Evacuate:	Yes.
Extinguishant:	Foam or dry agent.
Risk of violent reaction or explosion:	Yes. Vapour/air mixtures may be flammable or explosive. Vapours are heavier than air - risk of remote ignition.
Products of combustion:	Oxides of carbon, black smoke, noxious fumes.
Protective Equipment:	Breathing apparatus and protective gloves for fire only.

Section 6: Accidental Release Measures

Emergency Procedures:

Contain.
Shut off all sources of ignition.
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:

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 concentrated vapours.
Keep away from naked flames and other sources of ignition.

Conditions for safe storage:

Store in a cool, well ventilated place, out of reach of children. Large quantities should be stored in a bonded flammables store. Store in original container. Keep container tightly closed and out of direct sunlight. Keep away from naked flames and other sources of ignition. Prevent vapours from collecting in enclosed or low lying spaces. Keep away from oxidising agents. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

Incompatibles:

Oxidising agents.

Section 8: Exposure Controls/Personal Protection**National Exposure Standards:**

ES-TWA:	Acetone	500 ppm, 1,185 mg/m ³	
		Not assigned by NOHSC, but see:	
	d-Limonene	110 mg/m ³	[Germany]
	Kerosene	200 mg/m ³	[ACGIH]
ES-STEL:	Acetone	1,000 ppm, 2,375 mg/m ³	
		Not assigned by NOHSC, but see:	
	Kerosene	300 mg/m ³	[Poland]
ES-PEAK:	None assigned.		
Notations:		None assigned by NOHSC, but see:	
	d-Limonene	Skin, Sens.	[Germany]
	Kerosene	Skin.	[ACGIH]

[Skin] indicates that this material may be absorbed via unbroken skin, and any such contact may invalidate the TLV.

[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:

Use **only** flame proof equipment.
 Ensure adequate ventilation (same as outdoors) when using.
 If handling industrial quantities, or if vapour 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.
 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:

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

Section 9: Physical and Chemical Properties

Appearance:	Pale yellow to brown, oily liquid.	
Odour:	Smell of citrus.	
pH:	No data.	
Vapour Pressure:	No data.	
Vapour Density:	Vapours will be heavier than air.	
Boiling Point:	From 56 °C	[acetone]
Melting Point:	No data.	
Volatiles:	About 79 %	
Volatile Organic Compounds (VOC):	About 79 %	
Evaporation Rate:	No data.	
Solubilities:	Miscible with water.	
Specific Gravity/Density:	About 0.85 g/mL @ 20 °C	
Flash Point:	< 23 °C	
Flammable Limits:	0.7 - 6.1 %	[d-limonene]
	2.5 - 12.8 %	[acetone]
	0.7 - 5.0 %	[kerosene]
Dust Explosion:	Not applicable.	
Auto-ignition Temperature:	255 °C	[d-limonene]
	465 °C	[acetone]
	210 °C	[kerosene]

Other Information:

Organic mixture containing mixed surfactants. May react with strong oxidising agents, strong reducing agents. Sensitive to light and air. May attack some plastics. Slippery when spilled.

Section 10: Stability and Reactivity

Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	Incompatible materials, sources of ignition, light, air.
Incompatible Materials:	Oxidising agents, reducing agents.
Hazardous Decomposition Products:	Oxides of carbon, black smoke, noxious fumes.
Hazardous Reactions:	Contact with strong oxidising agents may cause fire.

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, abdominal discomfort, headache, nausea, vomiting and diarrhoea. May affect the central nervous system, liver and kidneys. An aspiration risk.
---------------	-------------------	---

Skin: Irritating to skin. May cause redness, drying. Will decrease the skin. May be absorbed through the skin.

Eyes: Irritating to eyes. May cause redness, pain, blurred vision, tissue and corneal damage.

Inhaled: Irritating to nose, throat and mucous membranes. May cause coughing, sore throat, headache, confusion, dizziness, rapid and shallow breathing, rapid pulse, drowsiness, convulsions, loss of consciousness. Aspiration of froth into the lungs during swallowing or vomiting may cause serious lung damage, which should be treated as a medical emergency.

Chronic: Over-exposure may cause liver and kidney damage, and may affect the blood and bone marrow.

Skin contact with d-limonene may cause sensitisation, especially if the d-limonene has been partially oxidised by prolonged exposure to air.

d-Limonene has been classified by IARC as Group 3; unclassifiable as to carcinogenicity to humans. (1)

Chronic skin exposure to acetone may cause irritation, dry skin, cracking, dermatitis and infection.

LD₅₀ :	d-Limonene	4,400 mg/kg oral, rat.
	Acetone	5,800 mg/kg oral, rat.
LDLo:	Acetone	715 mg/kg oral, man.

Section 12: Ecological Information

Ecotoxicity: Toxic to aquatic organisms.

Persistence and degradability: May cause long term adverse effects in the aquatic environment. At least one of the surfactants used in this product is not considered to be readily biodegradable.

Mobility: Readily transported by water. Volatile components will readily evaporate to atmosphere.

Environmental Fate: No data.

Bioaccumulative potential: No data.

Other adverse environmental effects: Contains mixed surfactants. Local concentrations may be harmful to aquatic organisms, including fish.

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 sewer, natural waters or the environment.

Special precautions for landfill or incineration:

High temperature incineration.

Unsuitable for landfill.

Section 14: Transport Information

UN Number:	UN 1993
UN Proper shipping name:	Flammable liquid, n.o.s. (d-limonene, acetone)
Class and subsidiary risk:	3 Flammable liquid.
Packaging group:	II
Special precautions for user:	Do not store or transport with dangerous goods of classes 1, 2.1 (in bulk), 2.3, 4.2, 5.1, 5.2, 7.
HAZCHEM Code:	3[Y]E
Material for export:	Regulated. Refer to IMO/IMDG and IATA/ICAO .

Section 15: Regulatory Information

Poisons (SUSDP):	Schedule 5 Acetone > 25 %
Dangerous Goods:	Yes. UN 1993 3/II 3[Y]E.
Carcinogen:	Australia IARC NTP RTECS No. Yes. Yes. Yes.
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: July 2008
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.73, p.307, 1999.

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.