

MATERIAL SAFETY SHEET

1. IDENTIFICATION

Revision Date	April 2004			
Product Name	TUNG OIL			
Other Names	TUNG OIL CHINA WOOD OIL			
Uses	Edible oils, deep frying, margarines and inedible surface coatings and resins, printing inks.			
Contact Information	Organisation	Location	Telephone	Ask For
	Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61 2 97333000	Technical Officer
		11 Mayo Road Wiri Auckland 2104 New Zealand	+64 9 2506222	
	Poison Information Centre	Westmead NSW Australia	131126 1800-251525	
	Chemcall	Australia New Zealand	1800-127406 0800-243622	
	National Poisons Centre	New Zealand	0800-764766	

2. HAZARD IDENTIFICATION

NOT Hazardous according to criteria of NOHSC/ASCC.

Risk Phrases No data available.

Safety Phrases No data available.

ERMA New Zealand Approval Code

HSNO Hazard 6.3B 6.4A

Classification

This Material Safety Data Sheet may not provide exhaustive guidance for all HSNO Controls assigned to this substance. The ERMA Web Site should be consulted for a full list of triggered controls and cited regulations.

3. COMPOSITION/INFORMATION ON

Ingredients	Chemical Entity	CAS	Proportions
	TUNG OIL	[8001-20-5]	> 99.7
	Moisture & Impurities		< 0.3

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure.

Swallowed	Hot liquid can burn mouth. Treat burns accordingly.
Eye	Hot liquid can burn eyes. Treat burns accordingly.
Skin	Hot liquid can burn skin. Treat burns accordingly.
Inhaled	Not volatile.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient.
Aggravated medical conditions caused by exposure	No significant health effects could be found.

5. FIRE FIGHTING MEASURES

Extinguishing Media	Fire-fighters should wear full protective clothing including self-contained breathing apparatus. Use dry chemical, carbon dioxide. Water may be ineffective. Cool exposed containers with water.
Hazards from Combustion Products	Oils absorbed in clay or rags may auto ignite if heated previously above 100 deg C.
Special Protective Precautions and Equipment for Fire Fighters	No data available.
Flammability Conditions	Flash point: 260 deg C min. Ignition of temperature: 300 deg C min Heat of combustion: : 10.000 cal/g

Additional Information

Hazchem Code

N/A

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Clean-up personnel should wear protective equipment.

Methods and Materials for Containment and Clean Up

Contain all spills . Effect clean up when cold (solid) with scrapers, when hot with sand. Aquatic effect unharmed, biodegradable. May foul shoreline.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Ensure an eye bath and safety shower are available and ready for use.

Conditions for Safe Storage (Including Any Incompatibles)

Store at ambient temperatures at atmospheric pressure.

Container Type

Vented tanks, railcars or road tanks, IBC's, steel drums.

8. EXPOSURE CONTROLS / PERSONAL

National Exposure Standards

An exposure standard has not been established for this material by Worksafe Australia.

Biological Limit Values

No data available.

Engineering

Use in a naturally well-ventilated area, ensuring adequate ventilation to maintain exposure levels below recommended workplace standards.

Personal Protection

Eye protection: Wear goggles/ face shield if hot liquid Skin protection: Protective clothing if hot liquid Respiratory protection: None required

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Clear yellow to brown crude oils to pale yellow or golden coloured refined oils with little or no odour.

Formula

Not available

Odour

No data available.

Vapour Pressure

Not available mm Hg (1 atmosphere)

Vapour Density

No data available.

Boiling Point

260-280 deg C

Melting Point	Not available deg C
Solubility in Water	Nil
Specific Gravity	0.89-0.90 (Water = 1)
Flash Point	Test Unknown 230-250
pH	Not available ()
Lower Explosion Limit	Not available (as percentage volume in air)
Upper Explosion Limit	Not available (as percentage volume in air)
Ignition Temperature	457
Specific Heat Value	No data available.
Particle Size	No data available.
Flame Propagation/Burning Rate of Solid Materials	No data available.
Properties of Materials That May Initiate or Contribute to Fire Intensity	No data available.
Potential for Dust Explosion	No data available.
Reactions that Release Flammable Gases	No data available.
Fast of Intensely Burning Characteristics	No data available.
Non-flammables That Could Contribute Unusual Hazards to a Fire	No data available.
Release of Invisible Flammable Vapours and Gases	No data available.
Decomposition Temperature	No data available.
Additional Information	Viscosity: 25-96 cp at 30 deg C Freezing Point: -25 - 16 deg C (typical)

10. STABILITY AND REACTIVITY

Chemical Stability No data available.

Conditions to Avoid No data available.

Incompatible Materials No data available.

Hazardous Decomposition Products No data available.

Hazardous Reactions No data available.

11. TOXICOLOGICAL INFORMATION

Toxicity Data Oral LD50 = 15 g/kg Dermal LD50 = not available Inhalation LC50 = not available

Health Effects - Acute

Swallowed LD50 : 15 g/kg

Eye Not hazardous unless hot liquid. Contact with eyes to be avoided if hot.

Skin Not hazardous unless hot liquid, contact with skin to be avoided if hot.

Inhaled Not volatile.

12. ECOLOGICAL INFORMATION

Ecotoxicity No data available.

Persistence and Degradability No data available.

Mobility No data available.

Environmental Fate (Exposure) No data available.

Bioaccumulative Potential No data available.

13. DISPOSAL CONSIDERATIONS

Disposal Dispose of in accordance with all Federal, State and Local regulations.

Special Precautions for Land Fill or Incineration No data available.

14. TRANSPORT INFORMATION

UN Number	Not applicable.
Shipping Name	TUNG OIL
Dangerous Goods Class	Not applicable.
Subsidiary Risk	Not applicable.
Pack Group	Not applicable.
Precaution for User	No data available.
Hazchem Code	N/A

15. REGULATORY INFORMATION

No data available.

Poisons Schedule	N/A
EPG	N/A
AICS Name	TUNG OIL
NZ Toxic Substance	N

16. OTHER INFORMATION

Literature References No data available.

Sources for Data No data available.

Legend to Abbreviations and Acronyms

<	less than
>	greater than
AICS	Australian Inventory of Chemical Substances
CAS	Chemical Abstracts Service (Registry Number)
cm ²	square centimetres
CO ₂	Carbon Dioxide
COD	Chemical Oxygen Demand
deg C (°C)	degrees Celsius
ERMA	Environmental Risk Management Authority
g	gram
g/cm ³	grams per cubic centimetre
g/l	grams per litre

HSNO	Hazardous Substance and New Organism
IDLH	Immediately Dangerous to Life and Health
immiscible	liquids are insoluble in each other
kg	kilogram
kg/m ³	kilograms per cubic metre
LC50	LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD50	LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals
ltr	Litre
m ³	cubic metre
mbar	millibar
mg	milligram
mg/24H	milligrams per 24 hours
mg/kg	milligrams per kilogram
mg/m ³	milligrams per cubic metre
Misc	miscible
miscible	liquids form one homogeneous liquid phase regardless of the amount of either component present
mm	millimetre
mPa.s	milli Pascal per second
N/A	Not Applicable
NIOSH	National Institute for Occupational Safety and Health
NOHSC	National Occupational Health and Safety Commission
OECD	Organization for Economic Co-operation and Development
PEL	Permissible Exposure Limit
ppb	parts per billion
ppm	parts per million
ppm/2h	parts per million per 2 hours
ppm/6h	parts per million per 6 hours
RCP	Reciprocal Calculation Procedure
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
tne	tonne
TWA	Time Weighted Average
ug/24H	micrograms per 24 hours
UN	United Nations (number)
wt	weight