



# T300 TUNG OIL

## MATERIAL SAFETY DATA SHEET

**Last Revised: December 3, 2024**

### Section 1: Substance/preparation and company identification

Company:

Warrior Pte Ltd

Contact address:

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**Product Name: Tung Oil / Wood Oil**

#### PRODUCT IDENTIFICATION

CAS NO. : 8001-20-5 EINECS NO. 232-272-3 FORMULATED Mixture

TOXICITY: Harmless, no side-effects encountered, but is inedible

SYNONYMS China Wood Oil;

Emergency Information: Use of the substance/preparation for the manufacturing of binders for the paint-industry, with the properties for faster drying and higher water-and alkali resistance in the printing-ink industry

### Section 2: Composition/information on ingredients

#### Description:

A high-temperature polymerized Tung oil. A vegetable oil, Triglyceride-Ester with following fatty acid composition:

Myristin acid C 14:	0 traces
Palmitic acid C 16:	0 2 – 4 %
Stearic acid C 18:	0 2 – 4 %
Oleic acid C 18:	1 8 – 12 %
Linolenic acid C 18:	2 12 - 16 %
Elaeostearic acid C 18:	78 – 82 %

### Section 3: Hazard identification

#### Identification letter and hazard symbols of the product:

R-Phrases 43

S-Phrases 24 - 37

#### Possible hazards:

Skin contact: Can cause irritation.

### Section 4: First-aid measures

Eye contact: Flush with plenty of water, contact for medical advice.

Skin contact: Wash with water and soap.

Inhalation: Concerns only the product when HOT. Move the victim to a ventilated area.  
Not applicable for Tung oil at room temperature as there is no vapour evaporation.

Ingestion: Drink water or milk and consult for medical advice.



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### Section 5: Fire-fighting measures

Tung oil is claimed as non-flammable, but whilst burning, heat and smoke arise, The Tung Oil will react exothermically with gelling effect by auto-polymerisation. This is caused by the high content of conjugated Elaeostearic acid, where the Tung Oil strongly reacts at temperatures above 150°C.

**Suitable extinguishing media:** Foam, Dry powder, Carbon dioxide.

**NOT TO BE USED:** **Water.** It may spread the fire. The water might boil explosively and hurt people.

**Special exposure hazards:** Avoid inhalation of vapor and smoke. This can irritate nose and eyes. Smoke can cause eyes to water.

**Equipment for firefighting:** Usual equipment necessary.

**For big fire:** Oxygen mask and equipment required.

### Section 6: Accidental release measures

Tung Oil is relatively harmless. It is a drying oil which, if left over for a few days, will form a hard film.

**After spillage / leakage:** Evacuation is not necessary. Absorb with absorbent materials.  
Clean the floor with hot water and soap or use an alkaline cleaner. Wear slip-free shoes.

### Section 7: Handling and storage

- Respect the normal precautions for handling liquid chemicals.
- Store the closed drums cool and dry.
- For bulk lots, keep the temperature as low as possible.
- Prolonged heating of for example 50-60°C, could cause darkening of the Tung Oil.
- Avoid contact with copper or copper-alloy; this could cause change of color of the material due to the reaction of the free fatty acids and the metal.

### Section 8: Exposure controls and personal protection

- Take the normal precautions for liquid chemicals.
- Special personal protection equipment is not required. Nevertheless, protective measures are advised.
- Working area will depend on the concentration and amount of the oil use, as hot oils have high heat content and splashes could be flammable.

**Hand protection:** Wear non-absorbent gloves when handling.

**Eye protection:** Wear safety goggles when handling hot oil.

**Skin protection:** Wear normal industrial clothing and wash regularly.



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### Section 9: Physical and chemical properties

Appearance:	Clear, Yellow Form Liquid
Color:	Bright to Dark yellow
Smell:	Nutty fatty
Boiling point / boiling range:	N/A Melting point
Melting range:	N/A
Flashpoint:	Over 200°C.
Flammability:	Combustible Auto ignition
Lower Explosion limit:	N/A
Upper Explosions limit:	N/A
Vapour pressure:	N/A at 20°C.
Relative Density:	0.942 at 15.5°C. Ca.
Solubility in Water:	Insoluble
Solubility in oil:	Soluble
Viscosity:	1.8 P at 25°C. Ca
Stability and reactivity:	In general, under normal conditions it is stable.
Thermic decomposition: Over 250°C.:	None, at normal temperature, Polymerized tung oil, when combined with a complex mixture of decomposing products—mainly aldehydes, ketones, and lac tones—can generate acrolein.
Hazardous reaction:	Not known

### Section 10: Toxicological information

Oral:	Harmless, no side-effects encountered, inedible.
Skin:	In general, the oil is not considered as toxic, but on sensitive skin, irritation could occur. Prolonged contact with sensitive skin could cause irritation and redness to occur.
Eye:	Irritation. Wash out the eyes immediately with clean water.
Others:	Non-applicable

### Section 11: Ecological information

Biodegradability :	The product is biodegradable.
Aquatic toxicity :	No data available, but does not exclude possibility of toxicity. The possible danger exists that the floating, oily film cuts the oxygen supply.
Bacterial toxicity :	No data available, but does not exclude possibility of toxicity.



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### Section 12: Disposal considerations

Must be dumped or incinerated in accordance with local regulations.

### Section 13: Transportation information

Following our present state of knowledge, there is no restriction.

### Section 14: Regulatory information

Characterization as to EC regulations:

Symbols Xi irritating

R-phrases 43 possible sensitization by skin contact

S-phrases 24 –37 avoid skin contact, wear suitable gloves.

### Section 15: Other information

- Any other intended applications should be discussed with the manufacturer.
- If you have any queries relating to this MSDS, its contents or any other product safety related questions, please write to the following e-mail address: [war99@singnet.com.sg](mailto:war99@singnet.com.sg)
- The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.