

Safety Data Sheet

Revision Date 09.26.2022

Revision: 1

1 Identification of the substance/mixture and the company/undertaking

1.1 Product identifier
Trade name: Tung Oil
Article number: A-238

1.2 Application of the substance / the mixture: Flexible Potting

1.3 Details of the supplier of the Safety Data Sheet
Manufacturer/Supplier:



Copps Industries, Inc.
10500 N. Commerce Street
Mequon, WI 53092
Phone: (262) 238-1700

1.4 Emergency telephone number:
ChemTel Inc.
(800) 255-3924, +1 (813) 248-0585

2 Hazards identification

2.1 GHS Classification of the substance or mixture

Tung Oil is not classified as dangerous according to directive 67/548/EEC.
Tung Oil is not a dangerous substance according to GHS and has no known OSHA hazards.

HMIS Rating:

Health: 0
Flammability: 1
Physical Hazard: 0

3 Composition/information on ingredients

3.2 Mixture

Description: Substance listed below with nonhazardous additions possible.

Dangerous components:

CAS: 8001-20-5	Naturally occurring triglyceride ester containing various fatty acids.	60-100%
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4 First aid measures

4.1 Description of first aid measures

General: Remove contaminated clothing.

Inhalation: Not applicable as there is no appreciable vapour from Tung Oil at normal room temp.

Ingestion: If ingested give water or milk and seek medical advice.

Eye Contact: Flush with clean water or approved eye wash solution and seek medical advice.

Skin Contact: Remove contaminated clothing. Wash skin thoroughly with soap and water or other recognized skin cleaner. Use protective hand cream if possible.

4.2 Most important symptoms and effects, both acute and delayed: No relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed: No relevant information available.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Foam, Fire-extinguishing powder, Carbon dioxide. Never use water as this may float the oil and spread fire.

5.2 Special hazards arising from the substance or mixture: May be ignited only if preheated to temperatures above high flash point, for example in a fire.

Safety Data Sheet

Revision Date 09.26.2022

Revision: 1

5.3 Advice for the firefighters

Protective equipment: Special Protective Equipment Standard Fireman's Body Protection and self-contained breathing apparatus is recommended. Exposure Hazards Avoid breathing fumes and smoke which may irritate nasal passages. Wear fully protective suit.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: No health effects expected from clean-up. Contain spill with sand, earth or other inert absorbent.

7 Handling and storage

7.1 Precautions for safe handling: Handling: Avoid spills and keep away from sources of ignition. Storage: Keep containers closed and in dry area away from heat & light in tightly closed receptacles (60-80F recommended).

7.2 Conditions for safe storage, including any incompatibilities: No additional information.

8 Exposure controls/personal protection

8.1 Control parameters

Engineering measures: No special measures required

Control Parameters: None

Personal Protection: Usual, same as for handling chemicals

- Respiratory Equipment: None
- Hand Protection: Neoprene gloves
- Eye Protection Protective: Safety glasses
- Skin Protection: Chemical resistant gloves, long-sleeve shirts, pants

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance

Form:	Clear liquid
Colour:	Amber
Odour:	Slight odor of vegetable oil
Odour threshold:	No data available
pH:	No data available
Melting point/range:	No data available
Boiling point/range:	No data available
Flash point:	>392 °F / >200 °C
Evaporation rate:	No data available
Flammability (solid, gaseous):	Not applicable
Upper/lower flammability or explosive limit:	Not applicable
Vapor pressure:	No data available
Vapor density:	No data available
Relative Density at 20°C:	0.94 g/cm ³
Solubility in / Miscibility with Water:	Not miscible
Partition coefficient (n-octanol/water):	No data available
Auto/Self-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity	100 - 300 cps

10 Stability and reactivity

10.1 Reactivity Normally considered stable

Safety Data Sheet

Revision Date 09.26.2022

Revision: 1

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: Keep from contact with oxidizing materials. Keep away from sources of ignition /flame.

10.3 Possibility of hazardous reactions: Keep from contact with oxidizing materials. Keep away from sources of ignition /flame

10.4 Conditions to avoid: Keep from contact with oxidizing materials. Keep away from sources of ignition /flame.

10.5 Incompatible materials: No data available.

10.6 Hazardous decomposition products: Over 250°C some decomposition may occur causing polymerization and a complex mixture of aldehydes, ketones and lactones predominantly acrolein.

11 Toxicological information

11.1 Information on likely routes of exposure: Not expected to be toxic but it is inedible.

12 Ecological information

12.1 Toxicity

Aquatic toxicity:

Degradability: Readily biodegradable

Fish Toxicity: No data available

Bacterial toxicity: No data available

13 Disposal considerations

13.1 Waste treatment methods Confine with sand or other inert media. Return to containers. Dispose in accordance with local, state and federal regulations. Air oxidation of material may cause it to spontaneously ignite. Spread oil rags to dry without contact with each other, or soak in water and then seal in closed container before disposal.

14 Transport information

DOT

UN number: Not Regulated

IATA

UN number: Not Regulated

IMDG

UN number: Not Regulated

TDG

UN number: Not Regulated

15 Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

United States (USA)

SARA

Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

Component(s) above 'de minimus' level: None

TSCA (Toxic Substances Control Act):

All the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer: None

Safety Data Sheet

Revision Date 09.26.2022

Revision: 1

Canada

Canadian Domestic Substances List (DSL):
All ingredients are listed.
Canadian Ingredient Disclosure list (limit 0.1%)
None of the ingredients is listed.
Canadian Ingredient Disclosure list (limit 1%)
None of the ingredients is listed.

15.2 Chemical Safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviation and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienist.

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substance

CAS: Chemical Abstracts Service (division of the American Chemical Society)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

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Safety Data Sheet

Revision Date 09.26.2022

Revision: 2

1 Identification of the substance/mixture and the company/undertaking

1.1 Product identifier

Trade name: **B-238 Hardener**

1.2 Application of the substance / the mixture: Flexible Potting

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer/Supplier:



Copps Industries, Inc.
10500 N. Commerce Street
Mequon, WI 53092
Phone: (262) 238-1700

1.4 Emergency telephone number:

ChemTel Inc.
(800) 255-3924, +1 (813) 248-0585

2 Hazards identification

2.1 GHS Classification of the substance or mixture

Corrosive to metals - Category 1
Acute toxicity – Oral Category 4
Skin irritation - Category 2
Reproductive toxicity - Category 2
Serious Eye Damage - Category 1
Acute aquatic toxicity - Category 1
Chronic aquatic toxicity - Category 1

2.2 GHS Label elements

Hazard pictograms/symbols



Signal word: Danger

Hazard statements:

H290: May be corrosive to metals.
H302: Harmful if swallowed.
H315: Causes skin irritation.
H318: Causes serious eye damage.
H361: Suspected of damaging fertility or the unborn child.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P202: Do not handle until all safety precautions have been read and understood.
P234: Keep only in original container.
P264: Wash skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P273: Avoid release to the environment.
P280: Wear eye protection/ face protection.
P281: Use personal protective equipment as required.
P301 + P312 + P330: IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 + P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
P332 + P313: If skin irritation occurs: Get medical advice/ attention.
P362: Take off contaminated clothing and wash before reuse.
P390: Absorb spillage to prevent material damage.
P406: Store in corrosive resistant stainless-steel container with a resistant inner liner.

Safety Data Sheet

Revision Date 09.26.2022

Revision: 2

P501: Dispose of contents/ container to an approved waste disposal plant.

Additional information: None.

HMIS Rating:

Health: 3
Flammability: 1
Physical Hazard: 0

3 Composition/information on ingredients

3.2 Mixture

Description: Mixture of substances listed below with potential nonhazardous additions.

Dangerous components:

Trade Secret	Castor Oil	60-100%
Trade Secret	Phosphate diluent	<10%
CAS: 7705-08-0	Ferric chloride	<5%

In conformity with 29CFR 1910.1200(i) the specific chemical identity may be withheld as Trade Secret, while all health/safety properties and effects are included in the SDS.

4 First aid measures

4.1 Description of first aid measures

General information: Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Take off contaminated clothing and shoes immediately.

After eye contact: Rinse immediately with plenty of water for at least 15 minutes. If symptoms persist, consult a doctor.

After ingestion: Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side. Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed: None known.

4.3 Indication of any immediate medical attention and special treatment needed: No data available.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Foam, Fire-extinguishing powder, Carbon dioxide.

5.2 Specific hazards arising from the substance or mixture: May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

5.3 Advice for the firefighters

Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit.

Additional information: Cool endangered receptacles with water fog or haze. Eliminate all ignition sources if safe to do so.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Use respiratory protective device against the effects of fumes/dust/aerosol. Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources.

6.2 Environmental precautions: Do not allow to enter sewers/surface or ground water. Inform respective authorities in case of seepage into water course or sewage system. Prevent from spreading (e.g. by damming-in or oil barriers).

6.3 Methods and material for containment and cleaning up: Send for recovery or disposal in suitable receptacles. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

7 Handling and storage

7.1 Precautions for safe handling: Use only in well-ventilated areas. Store in cool, dry place in tightly closed receptacles (60-80°F recommended).

Safety Data Sheet

Revision Date 09.26.2022

Revision: 2

7.2 Conditions for safe storage, including any incompatibilities: Use only receptacles specifically permitted for this substance/product. Avoid storage near extreme heat, ignition sources or open flame.
Further Information about storage conditions: Keep container tightly sealed. Store in an area with adequate ventilation.

8 Exposure controls/personal protection

8.1 Control parameters

Exposure Limits: No data available for mixture itself

8.2 Engineering controls Provide readily accessible eye wash stations and safety showers. Provide ventilation adequate to ensure concentrations are minimized.

8.3 Personal protective equipment

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin.

Respiratory protection: Not required under normal conditions of use. Use suitable respiratory protective device in case of insufficient ventilation. For spills, respiratory protection may be advisable. Use respiratory protection when grinding or cutting material.

Hand protection: Protective, impervious gloves. (Neoprene, Butyl-rubber, Nitrile rubber) The glove material has to be impermeable and resistant to the product / the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Eye protection: Face shield with safety glasses or goggles underneath. Contact lenses should not be worn.

Skin and Body protection: Protective work clothing. Where potential exposure warrants, rubber or plastic boots and chemically resistant protective suit.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance

Form:	Liquid
Colour:	Dark greenish to brown
Odour:	Oily
Odour threshold:	No data available
pH:	Acidic
Melting point/range:	No data available
Boiling point/range:	>350 °F / >176 °C
Flash point:	>200 °F / >93 °C
Evaporation rate:	No data available
Flammability (solid, gaseous):	Not applicable
Upper/lower flammability or explosive limit:	Not applicable
Vapor pressure:	No data available
Vapor density:	No data available
Relative Density at 20°C:	0.99 g/cm ³
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	No data available
Auto/Self-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity	800 -1,800 cps

10 Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions: Reacts with strong alkali. Reacts with strong acids and oxidizing agents.

10.4 Conditions to avoid: Avoid contact with strong oxidizing agents, excessive heat or flames.

Safety Data Sheet

Revision Date 09.26.2022

Revision: 2

10.5 Incompatible materials: Strong oxidizing agents, Potassium, Alkali metals, Bases, Exothermic in contact with water.

10.6 Hazardous decomposition products: Carbon oxides Oxides of phosphorus.

11 Toxicological information

11.1 Information on likely routes of exposure:

Skin contact: Harmful in contact with skin. Causes skin burns.

Eye contact: Causes eye burns.

Ingestion: Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Inhalation: May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

11.2 Symptoms related to physical, chemical and toxicological characteristics: Repeated and/or prolonged exposures to low concentrations of vapors or aerosols may cause: sore throat, asthma, eye disease, skin disorders and allergies.

11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure: This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. May cause allergic skin reaction. This product may cause adverse reproductive effects. Asthma, Eye disease, Kidney disorders, Liver disorders, Skin disorders and Allergies. CMR effects tris(methylphenyl) phosphate (Component) : Reproductive toxicity: Suspected of damaging fertility or the unborn child.

11.4 Numerical measures of toxicity: No data is available for full mixture.

Ferric chloride	CAS: 7705-08-0	Oral LD50	1,300 mg/kg (mouse)
		Dermal LD50	>2,000 mg/kg (rabbit)

12 Ecological information

12.1 Aquatic toxicity: No data available on the product itself.

Toxicity to fish – Components
(Phosphate diluent):

LC50: 0.75 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)

(Phosphate diluent):

LC50: LC50: > 100 mg/l
Exposure time: 96 h
Pimephales promelas (fathead minnow)

Toxicity to daphnia – Components
(Phosphate diluent):

EC50: 0.146 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 202 (Product)

12.2 Persistence and degradability: No data available for product itself.

12.3 Bioaccumulative potential: No data available on the product itself.

12.4 Mobility in soil: No data available.

12.5 Other adverse effects: No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods

Waste from residue/unused product: This product should not be allowed to enter drains, water courses or the soil.

Dispose of this material in a safe manner and in accordance with federal, state and local regulations

Contaminated packaging: Disposal must be made in accordance with official federal, state and local regulations.

14 Transport information

DOT

UN number: UN2582
Proper Shipping Name: Ferric Chloride, solution
Hazard Class: 8

Safety Data Sheet

Revision Date 09.26.2022

Revision: 2

IATA	Packing Group:	III
	Labels(s):	8
	Marine Pollutant:	Yes (phosphate diluent)
IMDG	UN number:	UN2582
	Proper Shipping Name:	Ferric Chloride, solution
	Hazard Class:	8
	Packing Group:	III
	Labels(s):	8
TDG	Marine Pollutant:	Yes (phosphate diluent)
	UN number:	UN2582
	Proper Shipping Name:	Ferric Chloride, solution
	Hazard Class:	8
	Packing Group:	III
	Labels(s):	8
	Marine Pollutant:	Yes (phosphate diluent)

15 Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Toxic Substance Control Act (TSCA) 12(b) Component(s): None.

Country	Regulatory list	Notification
USA	TSCA	Included on Inventory.
EU	EINECS	Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer.
Canada	DSL	Included on Inventory.
Australia	AICS	Included on Inventory.
Japan	ENCS	Included on Inventory.
South Korea	ECL	Included on Inventory.
China	SEPA	Included on Inventory.
Philippines	PICCS	Included on Inventory.

SARA

Section 355 (extremely hazardous substances):
None of the ingredients is listed.
Section 313 (Specific toxic chemical listings):
Component(s) above 'de minimus' level: None
TSCA (Toxic Substances Control Act):
All the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer: None
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15.2 Chemical Safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Safety Data Sheet

Revision Date 09.26.2022

Revision: 2

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DOT: US Department of Transportation

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GHS: Globally Harmonized System of Classification and Labeling of Chemicals

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