

**Dark Half (Pine Mix)**

Issue Date: 27-Dec-2024

Revision Date: 27-Dec-2024

Version 1

**Section 1. IDENTIFICATION**

**Product Identifier**

**Product Form:** Substance  
**Substance Name:** Pure Tung Oil/Pine Dipentene  
**SDS#** DHP  
**Synonyms:** Dipentene, Tung Oil, China Wood Oil  
**Use of the substance/mixture:** Finishing and Sealing of Porous Surfaces

**Name, Address and Telephone of the Responsible Party**

**Supplier Address:**  
Real Milk Paint, LLC  
126 Commerce Dr.  
Hohenwald, TN 38462  
[www.realmilkpaint.com](http://www.realmilkpaint.com)

**Emergency Telephone Number**

Chemtel 24 hours (within US only) 800-255-3924  
Chemtel 24 hours (outside continental US) 813-248-0585

**Section 2. HAZARDS IDENTIFICATION**

*This product is considered hazardous according to OSHA's Hazard Communication Standard as well as European Union Directives 67/548/EEC and 1999/45/EC and international GHS standards and was prepared using Regulations 1907/2006 and 1207/2008.*

**Per Regulation 67/548/EEC**

**DANGER!**

**Graphical Indications of Hazards**

**Indication of Principle Danger:**

N – Dangerous to the Environment  
Xn – Harmful



**Most Important Hazards (R Phrases):**

R10 – Flammable  
R38 – Irritating Skin  
R43 – May Cause sensitization by skin contact  
R50/53 – Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment  
R65 – Harmful: may cause lung damage if swallowed

**Hazard Statements:**

H226 – Flammable liquid and vapor  
H304 – May be fatal if swallowed and enters airways  
H315 – Causes skin irritation  
H317 – May cause an allergic skin reaction

H400 – Very toxic to aquatic life

H410 – Very toxic to aquatic life with long lasting effects

**Precautionary Statements:**

P210 – Keep away from heat/sparks/open flames/hot surfaces. — No smoking

P233 – Keep container tightly closed

P240 – Ground/bond container and receiving equipment

P241 – Use explosion-proof electrical/ventilating/lighting/equipment

P242 – Use only non-sparking tools

P243 – Take precautionary measures against static discharge

P261 – Avoid breathing dust/fume/gas/mist/vapours/spray

P264 – Wash contaminated items thoroughly after handling

P272 – Contaminated work clothing should not be allowed out of the workplace

P273 – Avoid release to the environment

P280 – Wear protective gloves/protective clothing/eye protection/face protection

P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P302 + P352 – IF ON SKIN: Wash with plenty of soap and water

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P321 - Specific treatment. See first aid instructions.

P331 – Do NOT induce vomiting

P332 + P313 – If skin irritation occurs: Get medical advice/attention

P362 – Take off contaminated clothing and wash before reuse

P363 – Wash contaminated clothing before reuse

P370 + P378 – In case of fire: Use carbon dioxide, foam or dry chemical for extinction

P391 – Collect spillage

P403 + P235 - Store in a well-ventilated place. Keep cool.

P405 – Store locked up

501 – Dispose of contents/container in accordance with local/regional/national/international regulations.

**FDA – Food Additives Generally Recognized as Safe (GRAS):** 182.20

**Classification:** Substance

**Marine pollutant:** Y

**Section 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	EC No.	Weight-%	Substance Presenting Health Hazards (R-phases)
Hydrocarbons, Terpene processing, by-product (Dipentene)	68956-56-9	273-309-3	≈ 50	Xn; N; R10-38-43-50/53-65
Tung Oil	8001-20-5	232-272-3	≈ 40	None
Proprietary Ingredient	12002-43-6	310-127-6	≈ 10	None

**Section 4. FIRST AID MEASURES**

**First Aid Measures**

**General Advice:** As with any chemical, employees should thoroughly wash hands with soap and water after handling this material. If health disorder happens, call for medical help immediately. Immediately remove any clothing soiled by product.

<b>Eye Contact:</b>	Remove any contact lenses at once. Flush eyes with water for at least 15 minutes. If irritation persists, seek medical attention.
<b>Skin Contact:</b>	Wash affected area with copious amounts of soap and water. If irritation develops, seek medical attention.
<b>Inhalation:</b>	If symptoms of overexposure are experienced, move to fresh air.
<b>Ingestion:</b>	Seek medical attention immediately. <b>DO NOT</b> induce vomiting. Rinse mouth with water. <b>DO NOT</b> administer anything by mouth to an unconscious person. <b>DO NOT</b> leave victim unattended.

### Most Important Symptoms and Effects, Both Acute and Delayed

<b>Symptoms:</b>	Skin irritation and skin sensitization. The product may be fatal if swallowed and enters airways. Inhalation may cause irritation of the nose, throat, and respiratory tract.
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### Indication of any Immediate Medical Attention and Special Treatment Needed

<b>Notes to physician:</b>	In case of ingestion do not induce vomiting. <b>DO NOT</b> administer anything by mouth to an unconscious person. <b>DO NOT</b> leave victim unattended.
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## Section 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

<b>Suitable Extinguishing Media:</b>	Carbon dioxide, foam or dry chemical. <b>Caution:</b> Carbon dioxide will displace air in confined spaces and may create an oxygen deficient atmosphere.
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<b>Unsuitable Extinguishing Media:</b>	Water
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### Special Hazards Arising from the Substance or Mixture

Do not use water with full jet to prevent fire spreading. In case of fire, the following can be released: acrid fumes, carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) smoke, and soot.

### Advice for Firefighters

Vapors may be irritating to the eyes, skin, and respiratory tract. Firefighters should wear self-contained breathing apparatus (SCBA) and full firefighting turnout gear.

### Special Hazards

Product contains combustible organic ingredients. Fire may produce dense black smoke containing hazardous products of combustion.

### Additional information

Cool endangered receptacles with water spray. Collect contaminated firefighting water separately. It must not enter the sewage system. Dispose of fire debris and contaminated firefighting water in accordance with official regulations.

## Section 6. ACCIDENTAL RELEASE MEASURES

### **Personal Precautions, Protective Equipment and Emergency Procedures**

Use personal protective recommended in Section 8. Product is slippery when spilled. Isolate the hazard area. Deny entry to unnecessary and unprotected personnel.

### **Environmental Precautions**

Prevent further leakage or spillage. Keep away from drains, surface and ground water and soil. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers, surface or ground water.

### **Methods and Material for Containment and Cleanup**

Dike spill area and cap leaking containers as necessary to prevent further spreading of spilled material. Absorb spilled liquid with suitable material such as dirt or sand. Eliminate all ignition sources. Use equipment rated for use around combustible materials. Place in appropriate disposal container. Oil soaked rags may spontaneously combust; place in appropriate disposal container.

**References to other sections:** None

## Section 7. HANDLING AND STORAGE

### **Precautions for Safe Handling**

Use personal protection equipment as mentioned under “exposure controls/personal protection. Keep away from heat, sparks and flames. Protect against electrostatic charges. Open container slowly to release pressure caused by temperature variations. Do not allow this material to come in contact with eyes. Avoid prolonged contact with skin. Use in well-ventilated areas. Do not breathe vapors. Drum lining may occasionally chip and fall to the bottom of container; product should be filtered or strained before blending or repackaging. As with any chemical, employees should thoroughly wash hands with soap and water after handling this material.

### **Conditions for Safe Storage, Including any Incompatibilities**

Product may be packaged in phenolic lined steel containers or fluorinated plastic containers. Store in a well ventilated area with proper sprinkler/fire deterrent system. Storage temperature should not exceed the flash point for extended periods of time. Store away from oxidizing agents. Keep container closed when not in use. Air should be excluded from partially filled containers by displacing with nitrogen or carbon dioxide. Do not cut, drill, grind or weld on or near this container; residual vapors may ignite.

### **Specific End Use(s)**

No further relevant information available.

## Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

*The following information is given as general guidance*

### **Exposure Guidelines**

<b>Exposure Limits:</b>	None established
<b>Engineering Controls:</b>	Use in well ventilated area.
<b>PPE:</b>	Consistent with good occupational hygiene practices, personal protective equipment (PPE) should be used in conjunction with other control measures, including engineering controls, ventilation, and isolation.

<b>Eye/Face Protection:</b>	Wear safety glasses or goggles.
<b>Skin Protection:</b>	Nitrile gloves are recommended. Boots, apron, or bodysuit should be worn as necessary.
<b>Respiratory Protection:</b>	Not normally required. If adequate ventilation is unavailable, use NIOSH approved air-purifying respirator with organic vapor cartridge or canister.

## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

<b>Physical State:</b>	Liquid
<b>Odor:</b>	Pine terpene
<b>Appearance:</b>	Dark brown semi transparent liquid
<b>Odor Threshold:</b>	Not Determined
<b>Color:</b>	Dark Brown

Property	Values	Remarks / Methods
<b>Physical State</b>	Liquid	
<b>pH</b>	None	
<b>Melting Point</b>	-96° C, thickens at -78° C	
<b>Boiling Point/Boiling Range</b>	176° C / Not Determined	
<b>Flash Point</b>	>43° C (>109° F)	CC (Closed Cup)
<b>Evaporation Rate</b>	0.2 (BuAc = 1)	
<b>Flammability (solid,gas)</b>	Not Determined	
<b>Upper Flammability Limits</b>	UEL approx. 6.1%	
<b>Lower Flammability Limits</b>	LEL approx. 0.7%	
<b>Vapor Pressure</b>	<2mmHg at 20° C	
<b>Specific Gravity</b>	0.838 – 0.843 at 25° C (77° F)	
<b>Refractive Index</b>	1.471 – 1.474 at 20° C (68° F)	
<b>Water Solubility</b>	Insoluble	
<b>Solubility in Other Solvents</b>	Not Determined	
<b>Partition Coefficient</b>	Kow = 4.23	
<b>Autoignition Temperature</b>	Approx. 237° C	
<b>Decomposition Temperature</b>	Not Determined	
<b>Kinematic Viscosity</b>	Not Determined	
<b>Dynamic Viscosity</b>	Not Determined	
<b>Explosive Properties</b>	Not Determined	
<b>Oxidizing Properties</b>	Not Determined	
<b>Density</b>	0.937 g/cm <sup>3</sup> at 25° C (77° F)	
<b>Volatile Organic Compound (VOC)</b>	> 50%_425 g/L 3.4 lb. gallon	

**Other information:** None listed.

*Note: These properties represent a typical sample of the product, but actual values may vary. Certificates of Analysis and Specification Sheets are available upon request.*

## Section 10. STABILITY AND REACTIVITY

**Reactivity:** Minimal Hazard

**Chemical Stability:** Stable

**Possibility of Hazardous Reactions:** NHT, an antioxidant, can be added to prevent oxidation. Avoid long-term exposure to air. If storing partially-filled containers, fill headspace with an inert gas such as nitrogen or carbon dioxide.

**Conditions to Avoid:** Keep away from heat, sparks and flames. Keep away from children.

**Incompatible Materials:** Strong oxidizing agents and strong acids, including acidic clays, peroxides, halogens, vinyl chloride, and iodine pentafluoride.

**Hazardous Decomposition Products:** Oxides of dipentene, which can result from improper storage and handling, are known to cause skin sensitization. No decomposition if stored properly.

**Possibility of Hazardous Reaction:** BHT, an antioxidant, can be added to prevent oxidization. Avoid long term exposure to air. If storing partially filled containers, fill headspace with an inert gas such as nitrogen or carbon dioxide.

## Section 11. TOXICOLOGICAL INFORMATION

### Information on likely Routes of Exposure

**Likely Routes of Exposure:** Inhalation, skin, and eye contact.

**Acute effects:** This blend has not been tested for its toxicity.

**Chronic effects** This product is not classified for repeated dose toxicity. This product is not classified as a carcinogen by IARC or U.S. ACGIH, NTP or OSHA. This product has not been shown to produce genetic changes when tested on bacterial or animal cells. This product does not contain known reproductive or developmental toxins.

**Symptoms:** Skin irritation and skin sensitization. The product may be fatal if swallowed and enters airways. Inhalation may cause irritation of the nose, throat, and respiratory tract. Target organs: Eyes, respiratory system and skin.

## Section 12. ECOLOGICAL INFORMATION

### Ecotoxicity

According to the official classification this product may be very toxic to aquatic life. However, due to the physical properties of the product (density and volatility) it will not remain in the environment for an extended period of time.

### Persistence/Degradability

92.7% degraded within 21 days per CEC L33T82

### Bioaccumulation potential

Not determined.

### Mobility in Environment

Not determined.

## Section 13. DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

Recycling is a strongly preferred to disposal or burning. If disposing, please do so in accordance with official regulations in your area. Keep in mind that this product should not be disposed along with household garbage. Do not allow this product to reach any sewage waste system, as it may be detrimental to aquatic life. *European waste catalogue: e.g. 02 03 03 wastes from solvent extraction.*

Recommendation: Empty contaminated packaging thoroughly. Packaging may be recycled or repurposed after thorough and proper cleaning. Note that this packaging may not be cleansed and disposed of in the same manner as the product.

Moistened solids (e.g. cloth, pulp, filter panels, binger) can be burnt after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations. *European waste catalogue: e.gh.15 02 02 Filter and absorption materials with hazardous agents.*

**General Note:** All disposal of substance or packaging should be in accordance with all national, state, and local regulations.

## Section 14. TRANSPORT INFORMATION

*This information is given as general guidance. Please refer to current shipping paper for most up to date shipping information, including exemptions and special circumstances.*

The listed transportation classification does not address regulatory variations due to changes in package size, mode of shipment, or other regulatory descriptions.



### **Road – ADR**

Proper Shipping Name: TERPENE HYDROCARBONS, N.O.S.  
 Hazard Class: 3  
 UN Number: UN2319  
 Packing Group: III  
 Label/Placard: 3 Flammable Liquid

### **Rail – RID**

Proper Shipping Name: TERPENE HYDROCARBONS, N.O.S.  
 Hazard Class: 3  
 UN Number: UN2319  
 Packing Group: III  
 Label/Placard: 3 Flammable Liquid

### **Sea – IMDG**

Proper Shipping Name: TERPENE HYDROCARBONS, N.O.S.  
 Hazard Class: 3  
 UN Number: UN2319

Packing Group: III  
Marine Pollutant: Yes  
Label/Placard: 3 Flammable Liquid

**Air – IATA**

Proper Shipping Name: TERPENE HYDROCARBONS, N.O.S.  
Hazard Class: 3  
UN Number: UN2319  
Packing Group: III  
Label/Placard: 3 Flammable Liquid

**Section 15. REGULATORY INFORMATION****Per Regulation 67/548/EEC*****Indication of principle danger*****Warning symbols:**

F – Flammable  
N – Dangerous to the Environment  
Xn – Harmful  
R10-38-43-50/53-65  
S24-37-61-62

**Global Inventories**

This product is included in the following inventories:

USA (TSCA)<sub>1</sub>  
Canada (DSL)<sub>1</sub>  
Europe (EINECS/ELINCS/Polymer/NLP)  
Australia (AICS)<sub>1</sub>  
Korea (KECL)<sub>1</sub>  
Philippines (PICCS)  
Japan (ENCS)<sub>1</sub>

**United States Regulations****Proposition 65: California Safe Drinking Water and Toxic Enforcement Act of 1986**

This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

**SARA Title III (Section 313)**

This substance contains no materials subject to the reporting requirements of SARA Title III (Section 313)

**Section 16. OTHER INFORMATION**

This product was produced with Good Manufacturing Practices. It is a by-product of citrus, entirely of natural origin, and to the best of our knowledge contains no artificial flavors, sulfites, nitrites, or pesticide residue exceeding tolerances established by the U.S. FDA. It has not been adulterated or misbranded. It does NOT contain lead, cadmium, mercury, or hexavalent chromium or come in contact with these chemicals since it is a citrus derived essential oil produced by steam/vacuum distillation. Further, it is packaged in food grade containers with inert liners that do NOT contain lead, cadmium, mercury, or hexavalent chromium. It does NOT contain and is NOT manufactured with any of the Class I or II ozone-depleting substances listed under the United States Clean Air Act of 1990.

**Full R-phrases**



R10 – Flammable

R38 – Irritating to skin

R43 – May cause sensitisation by skin contact

R50/53 – Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment

R65 – Harmful: may cause lung damage if swallowed

### Full S-phrases

S24 – Avoid contact with skin

S37 – Wear suitable gloves

S61 – Avoid release to the environment. Refer to special instructions/safety data sheets

S62 – If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

### Legend

*ACGIH – American Conference of Governmental Industrial Hygienists*

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

*AIHA – American Industrial Hygiene Association*

*BHT – Butylated Hydroxytoluene*

*CAS # - Chemical Abstracts Service*

*CFR – United States Code of Federal Regulations*

*DOT – United States Department of Transportation*

*EC# - European Commission (aka EINECS, European Inventory of Existing Commercial Chemical Substances.)*

*ECHA - European Chemicals Agency*

*FDA – United States Food and Drug Administration*

*GHS – Globally Harmonized System of Classification and Labeling of Chemicals*

*GRAS – Generally Recognized as Safe*

*IARC – International Agency for Research on Cancer*

*ICAO – International Civil Aviation Organization*

*IMDG – International Maritime Code for Dangerous Goods*

*NFPA – National Fire Protection Association*

*NIOSH – United States National Institute for Occupational Safety and Health*

*NTP – United States National Toxicology Program*

*OSHA – United States Occupational Health and Safety Administration*

*RID – Regulations Concerning the International Transport of Dangerous Goods by Rail*

*TWA – Time Weighted Average*

**Caution:** The user should conduct his/her own experiments and establish proper procedures and control before attempting use on critical parts.

<b>NFPA</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	1	2	0	Not Determined
<b>HMIS</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	1	2	0	G



**Issue Date:** 27-Dec-2024  
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**Revision Note:**

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of this publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The Real Milk Paint Co. assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, The Real Milk Paint Co. assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

End of Safety Data Sheet