

**Outdoor Defense Oil**

Issue Date: 15-Feb-2017

Revision Date: 31-Jan-2023

Version 3

**Section 1. IDENTIFICATION**

**Product Identifier**

**Product Form:** Substance

**Substance Name:** Outdoor Defense Oil

**SDS#** ODO

**Synonyms:** Pine Oil, Hydrocarbons, Terpene processing, by product, Tung Oil, China Wood Oil, Zinc Stearate

**Use of the substance/mixture:** Solvents and Cleaners

**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**

**Emergency Overview**

**GHS Classification**

**Physical Hazards:** Flammable Liquids (3)

**Health Hazards:** Eye Irritations (2A), Skin Irritations (2),  
Skin Sensitizer (1A), Aspiration Toxicity (1)

**Environmental Hazards:** Acute Aquatic Toxicity (1), Chronic Aquatic Toxicity

**GHS Labeling**



**Signal Word:** *DANGER*

**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

H411 – Toxic to aquatic life with long lasting effects

**Precautionary Statements:**

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 soap and water.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so – continue rinsing affected eye(s)

P331: DO NOT induce vomiting

P333 + P313: If skin irritation or rash occurs, get medical attention/advice.

P337 + P313: If eye irritation persists get medical attention/advice

P501 – Dispose of contents/container in accordance with local/regional/national/international regulations.

### Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name	Chemical Name	CAS No.	Weight	Health Hazards
Tung Oil	China Wood Oil	8001-20-5	≈50%	None
Zinc Oxide	Zinc Oxide	1314-13-2	≈3%	None
Pine Oil	Hydrocarbons Terpene processing, by product	68956-56-9	≈50%	Aquatic Acute 2: H401; Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Eye Irrit. 2A: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Danger
(Contained in Pine Oil)	Geraniol	106-24-1	<1%	Aquatic Acute 3: H402; Eye Dam. 1: H318; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Danger
(Contained in Pine Oil)	Linalool	78-70-6	<1%	Aquatic Acute 3: H402; Eye Irrit. 2A: H319; Flam. Liq. 4: H227; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning
(Contained in Pine Oil)	Citral	5392-40-5	<1%	Acute Tox. 5: H313; Aquatic Acute 2: H401; Flam. Liq. 4: H227; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning

### 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. Keep good industrial hygiene measures.
- Eye Contact:** Remove any contact lenses at once. Flush eyes with water for at least 15 minutes. If irritation persists, seek medical attention.
- Skin Contact:** In case of skin contact, wash thoroughly with soap and water. Remove any soiled clothing if necessary.
- Inhalation:** Remove persons to fresh air and keep at rest in comfortable position for breathing. See a physician if breathing difficulty persists.
- Ingestion:** Seek medical attention or contact a poison control center for advice. **DO NOT** induce vomiting. Rinse mouth with water. **DO NOT** administer anything by mouth to an unconscious person.

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

- 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.

### Section 5. FIRE-FIGHTING MEASURES

## Extinguishing Media

**Suitable Extinguishing Media:** Polyvalent powder fire extinguishers (ABC powder), Water fog or spray, Foam, Dry Powder, Carbon Dioxide (CO<sub>2</sub>)

**Unsuitable Extinguishing Media:** If water must be used, use as a spray only to lower temperature.

**Hazardous Decomposition of Products:** FROM FIRE: Smoke, Carbon Dioxide, and Carbon Monoxide

### **Advice for Firefighters:**

Self contained positive pressure breathing apparatus and protective clothing should be worn when fighting fires involving chemicals. Vapors may be irritating to the eyes, skin, and respiratory tract. Firefighters should wear self-contained breathing apparatus (SCBA) and full firefighting turnout gear.

### Precautions for Fire Fighters

DANGER – FLAMMABLE LIQUID! Vapors may cause flash fires. May cause eye or skin irritation. Harmful or fatal if swallowed. Vapors and spray mist are harmful if inhaled. May produce a floating fire hazard.

### Unusual Fire Hazard or Explosion

Containers may explode from internal pressure if confined to fire. Cool with water. Keep unnecessary people away. Exercise care when disposing of rags contaminated with the product. Use normal precautions appropriate for oily rags.

## Section 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

ELIMINATE ALL SOURCES OF IGNITION. Eliminate all sources of ignition in the vicinity of the spill or released vapor. If this material is released into the work area, evacuate the area immediately. Monitor area with combustible gas indicator. Wear appropriate personal protective equipment when cleaning up spills. Eliminate potential sources of ignition. Handling equipment must be bonded and grounded to prevent sparking.

### Environmental Precautions

This product is a marine pollutant and is very toxic to aquatic organisms. Do not discharge into lakes, streams, ponds, or public waters.

### Methods and Material for Containment and Cleanup

Exercise caution. Eliminate potential sources of ignition. Use spark proof tools and explosion proof equipment. Dike and contain spill. Small spills may be absorbed by sand or oil absorbing materials. Large spills should be collected by pumping into closed containers for recovery or disposal. Spills over water will float and may be collected by oil absorbents and/or by skimming.

## Section 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Wear chemical safety glasses or goggles and chemically resistant gloves. A chemically resistant apron may be used to protect clothing. A respirator may be worn to prevent breathing spray and mists or heated fumes. Take precautionary measures against static discharges.

### Conditions for Safe Storage, Including any Incompatibilities

NO Smoking. Store in original container, preferably in a cool, ventilated, fire resistant building. Avoid heat, sparks, and open flames. Empty containers may retain product residues (vapor, liquid, or solid) all label precautions must be observed.

## Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

*The following information is given as general guidance*

### Exposure Guidelines

**Exposure Limit:** d-Limonene: 8h TWA=30 ppm (AIHA Standard)

**Engineering Controls:** Normal room ventilation is usually adequate. Provide exhaust ventilation or other engineering controls to keep the airborne concentration below any regulated limits. Mechanical ventilation may be necessary at elevated temperatures to control odors.

### Personal Protective Equipment (PPE)

**Eye Protection:** Wear chemical safety glasses, goggles, or face shield. Provide eye bath near work site.

**Skin Protection:** Wear chemically resistant rubber gloves and apron to minimize exposure.

**Respiratory Protection:** A respirator is not normally required. If vapor concentration is high, use a NIOSH approved organic vapor respirator or a properly fitted, air purifying or air fed respirator complying with an approved safety standard.

**Personal Hygiene Measures:** When using do not eat or drink. Wash hands and other exposed areas of skin with soap and water after handling the product.

## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

<b>Physical State:</b>	Liquid	<b>Odor:</b>	Astringent Aroma
<b>Appearance:</b>	Colorless to Pale Yellow	<b>Odor Threshold:</b>	Not Determined
<b>Color:</b>	Clear to Yellowish		

Property	Values	Remarks / Methods
Physical State	Liquid	
pH	N/A	
Melting Point/Freezing Point	Not Determined	
Boiling Point	Not Determined	
Flash Point	Not Determined	
Evaporation Rate	Not Determined	
Flammability (solid,gas)	Not Determined	
Upper Flammability Limits	Not Determined	
Lower Flammability Limits	Not Determined	
Vapor Pressure	Not Determined	
Specific Gravity	Not Determined	
Refractive Index	Not Determined	
Water Solubility	Insoluble	

<b>Solubility in Other Solvents</b>	Not Determined
<b>Partition Coefficient</b>	Not Determined
<b>Autoignition Temperature</b>	Not Determined
<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>	Not Determined
<b>Volatile Organic Compound (VOC)</b>	Not Determined

**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

<b>Reactivity:</b>	Not Determined
<b>Chemical Stability:</b>	Chemical is stable and not reactive under conditions of normal use.
<b>Hazardous Polymerization:</b>	Hazardous polymerization will not occur.
<b>Conditions to Avoid:</b>	Prolonged or excessive heat and/or exposure to air may cause non-hazardous decomposition and/or oxidization.
<b>Incompatible Materials:</b>	May react with strong acids, bases, and oxidizing agents.
<b>Hazardous Decomposition Products:</b>	Incomplete decomposition may produce carbon monoxide. Ultimate decomposition products are carbon dioxide and water.

### Section 11. TOXICOLOGICAL INFORMATION

#### Information on likely Routes of Exposure

<b>Target Organs:</b>	Eyes. Skin.
<b>Likely Routes of Exposure:</b>	Eye/skin contact
<b>Medical Conditions Aggravated by over exposure:</b>	No Known
<b>Symptoms Related to Over exposure:</b>	Prolonged exposure may cause skin irritation and/or sensitization.

#### **Relevant Hazards**

Acute Toxicity	Limonene: LD <sub>50</sub> (rat): > 5000 mg/kg Dipentene: LD <sub>50</sub> (rat): > 3500 mg/kg
Dermal Contact	Limonene: LD <sub>50</sub> (rat): > 5000 mg/kg Dipentene: LD <sub>50</sub> (rat): > 3500 mg/kg
Eye Contact	Contact with the undiluted material may cause eye irritation.
Respiratory or Skin Sensitization	Product may contain trace amounts of oxidized material which are allergenic to sensitive individuals. Avoid repeated or prolonged contact with skin.

Germ Cell Mutagenicity	Not determined for dipentene. Refere to WHO Concise International Chemical Assessment Document 5 for Limonene. Limonene: mouse lymphoma L5178Y test system, did not induce gene mutations. Limonene: AMES Test; Negative
Carcinogenicity	No component of the product is listed by IARC, ACGIH and NTP
Reproductive Toxicity	Not Determined
STOT – Single Exposure	Not Determined
STOT – Repeated Exposure	Not Determined
Aspiration Hazard	Component categorized as a Cat 1 Aspiration Hazard

**Section 12. ECOLOGICAL INFORMATION**

<b>Ecotoxicity:</b>	Product is a marine pollutant and is very toxic to aquatic organisms.
<b>Persistence/Degradability:</b>	92.7% in 21 days per method CEC L33T82.
<b>Bioaccumulation Potential:</b>	Not Determined
<b>Mobility in Environment:</b>	Not Determined

**Section 13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

**Disposal Methods:** This material, if discarded, would be considered a hazardous waste by EPA regulations 40 CFR 261 due to flammability. Dispose of this material at a local, state, or federally approved landfill, incinerator or recovery facility. User must determine proper disposal method and classification when material is declared a waste. User must determine proper recycling of container if applicable.

**Safe Handling of Wastes:** Refer to Section 8 for information pertaining to personal protective equipment and exposure controls when handling this material for disposal.

**General Note:** *All disposal or recycling 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.*

<b>US DOT</b>	UN2319, Terpene Hydrocarbons, N.O.S. (Limonene), 3, PGIII, Marine Pollutant
<b>ICAO/IATA</b>	UN2319, Terpene Hydrocarbons, N.O.S. (Limonene), 3, PGIII, Marine Pollutant
<b>IMO/IMDG</b>	UN2319, Terpene Hydrocarbons, N.O.S. (Limonene), 3, PGIII, Marine Pollutant

**Shipping Label** Flammable Liquid (Cat 3), Marine Pollutant (Environmental Cat 1)

**Exceptions** US DOT Non-Bulk Packaging: Refer to 49 CFR §173.150 & §171.4

**Section 15. REGULATORY INFORMATION**

**Chemical Inventories List**

<b>USA</b>	Compliant
<b>Canada</b>	Compliant
<b>Europe</b>	Not Determined
<b>Australia</b>	Not Determined
<b>Korea</b>	Not Determined
<b>Philippines</b>	Not Determined
<b>Japan</b>	Not Determined

**USA Federal and States Information:** OSHA – Hazardous by definition of 29 CFR 1910.1200 (Flammability)  
SARA 311/312 Hazard Category – Fire Hazard and Immediate (Acute) Health

**Section 16. OTHER INFORMATION**

This product was produced with Good Manufacturing Practices. 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 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.

**Full R-phrases**

- R10 – Flammable
- R38 – Irritating to skin
- R43 – May cause sensitization by skin contact
- R51/53 – Dangerous to the environment. 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
- S25 – Avoid contact with eyes
- S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- 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.

**Abbreviations & Acronyms:**

STOT (Specific Target Organ Toxicity)

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:** 15-Feb-2017  
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**Revision Note:** Composition Clarification/Update

**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