



Safety Data Sheet

Pine Oil 62%, Disinfectant, Detergent

SDS Revision
Date: 06/06/2019

1. Identification

1.1. Product identifier

Product Identity Pine Oil 62%, Disinfectant, Detergent

Alternate Names Pine Oil 62%, Disinfectant, Detergent
LHB Part Number: 1064301, 1064302, 1064303
NSN 6840-00678-7940 (Quart)
NSN 6840-00-584-3129 (1 Gal)
NSN 6840-00-551-8346 (Drum),
Unit of Issue 1 QT = 24/Case; 1Gal = 6/Case; Drum = 1 each,
CAGE# 0FTT5

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use See Product Label

Application Method See Product Label

1.3. Details of the supplier of the safety data sheet

Company Name LHB Industries
8833 Fleischer Place
Berkeley, MO 63134

Emergency

24 hour Emergency Telephone No. (800) 633-8253 (PERS)

Customer Service: LHB Industries (314) 423-4333

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Combustible Liquid;H227	Combustible Liquid.
Skin Irrit. 2;H315	Causes skin irritation.
Eye Dam. 2A;H319	Causes serious eye irritation.
Asp. Tox. 1;H304	May be fatal if swallowed and enters airways.
Aquatic Chronic 2;H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements



Danger

H227 Combustible liquid.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

[Prevention]:

P210 Keep away from heat, sparks, open flames, hot surfaces - No smoking.

P235 Keep cool.

P264 Wash thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves, eye protection, face protection.

[Response]:

P301+310 IF SWALLOWED: Immediately call a POISON CENTER, doctor or physician.

P302+352 IF on skin: Wash with plenty of soap and water.

P305+351+338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P321 Specific treatment (see information on this label).

P331 Do NOT induce vomiting.

P332+313 If skin irritation occurs: Get medical advice or attention.

P337+313 If eye irritation persists: Get medical advice or attention.

P362 Take off contaminated clothing and wash before reuse.

P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

P391 Collect spillage.

[Storage]:

P403+235 Store in a well ventilated place. Keep cool.

P405 Store locked up.

[Disposal]:

P501 Dispose of contents or container in accordance with local and national regulations.



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3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Pine oil CAS Number: 0008002-09-3	50 - 75	Skin Irrit. 2;H315 Eye Irrit. 2;H319 Flam. Liq. 3;H226 Asp. Tox. 1;H304 Aquatic Chronic 2;H411	[1]
Tall oil fatty acid CAS Number: 0061790-12-3	10 - 25	Not Classified	[1]
Isopropyl Alcohol CAS Number: 0000067-63-0	1 - 5	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336	[1][2]
Sodium hydroxide CAS Number: 0001310-73-2	1 - 5	Skin Corr. 1A;H314 Met. Corr. 1;H290	[1][2]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview	Treat symptomatically. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.
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Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.

Inhalation	May be fatal if swallowed and enters airways.
Eyes	Causes serious eye irritation.
Skin	Causes skin irritation.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray.
Do not use: water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Strong oxidizing agents, acids, bases and material that react with unsaturated hydrocarbons and alcohols.

Keep away from heat, sparks, open flames, hot surfaces - No smoking.

Keep cool.

5.3. Advice for fire-fighters

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water ways.

ERG Guide No. 129

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove sources of ignition, do not turn lights or unprotected electrical equipment on or off. In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapor levels are below the Lower Explosive Limit before re-entering.

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Use explosion proof equipment.



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Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Handle empty containers with care because residual vapors are flammable. Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container. Store in a dry, cool, and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Ground/bond container and receiving equipment. Use explosion-proof electrical, lighting, ventilating equipment.

Incompatible materials: Strong oxidizing agents, acids, bases and material that react with unsaturated hydrocarbons and alcohols.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

Section 8. Exposure controls and personal protection

8.1. Control parameters

CAS No.	Ingredient	Exposure	
		Source	Value
0000067-63-0	Isopropyl Alcohol	OSHA	TWA 400 ppm (980 mg/m ³) STEL 500 ppm
		ACGIH	TWA: 200 ppm STEL: 400 ppm
		NIOSH	TWA 400 ppm (980 mg/m ³) ST 500 ppm (1225 mg/m ³)
0001310-73-2	Sodium hydroxide	OSHA	TWA 2 mg/m ³
		ACGIH	Ceiling: 2 mg/m ³
		NIOSH	C 2 mg/m ³
0008002-09-3	Pine oil	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
0061790-12-3	Tall oil fatty acid	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

8.2. Exposure controls

Respiratory

If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.



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Eyes	Wear safety eyewear, e.g. safety spectacles, goggles or visors to protect against the splash of liquids.
Skin	Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. All parts of the body should be washed after contact.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

Section 9. Physical and chemical properties

Appearance	Straw yellow to dark amber, Liquid
Odor	Pine
Odor threshold	Not determined
pH	10.5
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	> 185°C (365°F)
Flash Point	77°C (170°F)
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Relative Density	0.945
Solubility in Water	Not Measured
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
VOC Content	VOC (Minus exempt solvents and water) No data available
Maximum Incremental Reactivity	Not Measured
HAPS (lbs/gal)	Not Measured
HAPS (lbs/gal of Solids)	Not Measured
HAPS (lbs/lb of Solids)	Not Measured
% Volatile (by volume)	Not determined

9.2. Other information

No other relevant information.



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Section 10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Ignition sources. Sparks.

10.5. Incompatible materials

Strong oxidizing agents, acids, bases and material that react with unsaturated hydrocarbons and alcohols.

10.6. Hazardous decomposition products

Strong oxidizing agents, acids, bases and material that react with unsaturated hydrocarbons and alcohols.

Section 11. Toxicological information

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Pine oil - (8002-09-3)	---	---	---	---	---
Tall oil fatty acid - (61790-12-3)	3,200.00, Rat - Category: 5	---	---	---	---
Isopropyl Alcohol - (67-63-0)	5,840.00, Rat - Category: NA	12,800.00, Rabbit - Category: NA	72.60, Rat - Category: NA	---	---
Sodium hydroxide - (1310-73-2)	325.00, Rabbit - Category: 4	---	---	---	---



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Carcinogen Data

CAS No.	Ingredient	Source	Value
0000067-63-0	Isopropyl Alcohol	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0001310-73-2	Sodium hydroxide	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0008002-09-3	Pine oil	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0061790-12-3	Tall oil fatty acid	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	2A	Causes serious eye irritation.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	1	May be fatal if swallowed and enters airways.

Section 12. Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l



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Pine oil - (8002-09-3)	18.35, Oncorhynchus mykiss	24.50, Daphnia magna	Not Available
Tall oil fatty acid - (61790-12-3)	1,000.00, Fish (Piscis)	1,000.00, Daphnia magna	1,000.00 (72 hr), Selenastrum capricornutum
Isopropyl Alcohol - (67-63-0)	10,000.00, Pimephales promelas	Not Available	Not Available
Sodium hydroxide - (1310-73-2)	125.00, Gambusia affinia	40.40, Ceriodaphnia sp.	Not Available

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

Section 13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Regulated	Not regulated	Not Regulated
14.2. UN proper shipping name			
14.3. Transport hazard class(es)			
14.4. Packing group			
14.5. Environmental hazards			
IMDG	Marine Pollutant: Yes; (Pine oil)		
14.6. Special precautions for user	Not Applicable		



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Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

US EPA Tier II Hazards

Fire: Yes
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): Yes
Delayed (Chronic): No

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

Isopropyl Alcohol

Section 16. Other information

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The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor.

H290 May be corrosive to metals.

H304 May be fatal if swallowed and enters airways.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H336 May cause drowsiness and dizziness.

H411 Toxic to aquatic life with long lasting effects.

IMPORTANT NOTE: This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party



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sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or any process. Final determination of suitability of any material is the sole responsibility of the user.

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