



Pine Oil 19.9%, Disinfectant, Detergent

Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

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NSN6840013424143

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

1.1. Product identifier

Product form : Mixture
Trade name : Pine Oil 19.9%, Disinfectant, Detergent
Product code : N/A
NSN : 6840-01-342-4143 (Liter)
Unit of issue : 1 LT = 24/ Case
GSA Contract# : GS-07F-P0060
Cage# : 1A862

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

Use of the substance/mixture : Industrial use only, EPA registration # 11668-17. Disinfectant, detergent.

1.3. Details of the supplier of the safety data sheet

The Lighthouse of Houston
3530 W. Dallas St.
Houston, Tx 77019
Tel: 713-527-9561
www.houstonlighthouse.org

1.4. Emergency telephone number

Emergency number : CHEM-TEL: 1 800 255-3924

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 3 H226
Eye Irrit. 2A H319

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



GHS02

GHS07

Signal word (GHS-US)

: Warning

Hazard statements (GHS-US)

: H226 - Flammable liquid and vapour
H319 - Causes serious eye irritation

Precautionary statements (GHS-US)

: 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
P264 - Wash hands thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: get medical advice/attention
P370+P378 - In case of fire: Use Foam. Dry powder. Carbon dioxide to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P501 - Dispose of contents/container to hazardous or special waste collection point, in

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accordance with local, regional, national and/or international regulation.

2.3. Other hazards

other hazards which do not result in classification : Potential CNS impairment ; upper respiratory irritation. May cause irritation to the respiratory tract.

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Pine oil	(CAS No) 8002-09-3	19.9	Not classified
Tall oil fatty acids	(CAS No) 61790-12-3	< 15	Not classified
Isopropyl alcohol	(CAS No) 67-63-0	10.5	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Sodium hydroxide	(CAS No) 1310-73-2	< 2	Met. Corr. 1, H290 Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314 Eye Dam. 1, H318

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : After contact with skin, wash immediately and thoroughly with water and soap. Remove all contaminated clothing and footwear.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice/attention.

First-aid measures after ingestion : If the person is fully conscious, make him/her drink water. Never give an unconscious person anything to drink. Call a poison center or a doctor if you feel unwell.

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

Symptoms/injuries after eye contact : Eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : None known

5.2. Special hazards arising from the substance or mixture

Fire hazard : Intense heat may cause container to burst

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Reactivity : Thermal decomposition generates : Oxides of carbon. Low molecular weight hydrocarbons.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers.

Protective equipment for firefighters : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

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6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Do not discharge into lakes, streams, ponds or public waterways unless in accordance with a National Pollutant Discharge Elimination System (NPDES) permit. For guidance, contact your State Water Board or regional office of the EPA.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8 : Exposure-controls/personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.

Incompatible materials : Oxidizing agent. Keep away from pesticides, fertilizer, and food.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Pine oil (8002-09-3)		
ACGIH	Not applicable	
OSHA	Not applicable	

Isopropyl alcohol (67-63-0)		
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm)	400 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	980 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	400 ppm

Sodium hydroxide (1310-73-2)		
ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³

Tall oil fatty acids (61790-12-3)		
ACGIH	Not applicable	
OSHA	Not applicable	

8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure good ventilation of the work station.

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Personal protective equipment : Protective goggles. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.



Hand protection : protective gloves. Neoprene. Nitrile. Rubber.
Eye protection : Safety glasses.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Dark yellow
Odour : Pine like
Odour threshold : No data available
pH : 10.5 - 11
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : 0 °C (32 °F)
Freezing point : No data available
Boiling point : 93 - 104 °C (200 - 220 °F)
Flash point : 34 °C (93 °F)
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Not applicable
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : 0.962 (water=1)
Solubility : Completely soluble in water
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : Ca. 22 mm²/S at 40 °C (104 °F)
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

VOC content : 77 % at 100 C volatile percent

SECTION 10: Stability and reactivity

10.1. Reactivity

React with oxidizing agent.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Oxidizing agent.

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10.6. Hazardous decomposition products

Thermal decomposition generates: Oxides of carbon. Low molecular weight hydrocarbons.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified
(Based on available data, the classification criteria are not met.)

Isopropyl alcohol (67-63-0)	
LD50 oral rat	1870 mg/kg
LD50 dermal rabbit	4059 mg/kg
LC50 inhalation rat (mg/l)	72600 mg/m ³ (Exposure time: 4 h)
ATE US (oral)	4396.000 mg/kg bodyweight
ATE US (dermal)	12800.000 mg/kg bodyweight

Sodium hydroxide (1310-73-2)	
LD50 dermal rabbit	1350 mg/kg
ATE US (dermal)	1350.000 mg/kg bodyweight

Tall oil fatty acids (61790-12-3)	
LD50 oral rat	7600 mg/kg

Skin corrosion/irritation : Not classified
(Based on available data, the classification criteria are not met.)
pH: 11 (10.5 - 11)

Serious eye damage/irritation : Causes serious eye irritation.
(Based on available data, the classification criteria are not met.)
pH: 11 (10.5 - 11)

Respiratory or skin sensitisation : Not classified
(Based on available data, the classification criteria are not met.)

Germ cell mutagenicity : Not classified
(Based on available data, the classification criteria are not met.)

Carcinogenicity : Not classified
(Based on available data, the classification criteria are not met.)

Isopropyl alcohol (67-63-0)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified
(Based on available data, the classification criteria are not met.)

Specific target organ toxicity (single exposure) : Not classified
(Based on available data, the classification criteria are not met.)

Specific target organ toxicity (repeated exposure) : Not classified
(Based on available data, the classification criteria are not met.)

Aspiration hazard : Not classified
(Based on available data, the classification criteria are not met.)

Symptoms/injuries after eye contact : Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

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Pine oil (8002-09-3)	
EC50 Daphnia 1	17 - 28 mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through])
Isopropyl alcohol (67-63-0)	
LC50 fish 1	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
Sodium hydroxide (1310-73-2)	
LC50 fish 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Isopropyl alcohol (67-63-0)	
Log Pow	0.05 (at 25 °C)
Tall oil fatty acids (61790-12-3)	
Log Pow	4.89 - 5.98 (at 25 °C)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer : No additional information available

Effect on the global warming : No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Empty containers can be dumped according to local legislation

SECTION 14: Transport information

In accordance with DOT

Transport document description (ADR) : UN1272 Pine oil, 3, III
UN-No.(DOT) : UN1272
Proper Shipping Name (DOT) : Pine oil
Hazard Classes (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : III - Minor Danger

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DOT Special Provisions (49 CFR 172.102)	: B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

UN-No. (IMDG)	: 1272
Proper Shipping Name (IMDG)	: PINE OIL
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: III - substances presenting low danger

Air transport

UN-No.(IATA)	: 1272
Proper Shipping Name (IATA)	: Pine oil
Class (IATA)	: 3 - Flammable Liquids
Packing group (IATA)	: III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Pine oil (8002-09-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Isopropyl alcohol (67-63-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on United States SARA Section 313	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	1.0 % (only if manufactured by the strong acid process, no supplier notification)
Sodium hydroxide (1310-73-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
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RQ (Reportable quantity)	50,000 lb

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Tall oil fatty acids (61790-12-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

15.2. International regulations

CANADA

Pine oil (8002-09-3)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class B Division 3 - Combustible Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Isopropyl alcohol (67-63-0)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Sodium hydroxide (1310-73-2)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class E - Corrosive Material

Tall oil fatty acids (61790-12-3)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

EU-Regulations

No additional information available

Isopropyl alcohol (67-63-0)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

Sodium hydroxide (1310-73-2)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

Tall oil fatty acids (61790-12-3)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

Classification according to Regulation (EC) No. 1272/2008 [CLP]

No information available

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

No information available

15.2.2. National regulations

Pine oil (8002-09-3)	
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)	

Isopropyl alcohol (67-63-0)	
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on the Canadian IDL (Ingredient Disclosure List)	

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Sodium hydroxide (1310-73-2)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Poisonous and Deleterious Substances Control Law
Listed on the Canadian IDL (Ingredient Disclosure List)

Tall oil fatty acids (61790-12-3)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

15.3. US State regulations

SECTION 16: Other information

Revision date : 03/27/2015

Full text of H-phrases:

-----	Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
-----	Eye Dam. 1	Serious eye damage/eye irritation, Category 1
-----	Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
-----	Flam. Liq. 2	Flammable liquids Category 2
-----	Flam. Liq. 3	Flammable liquids, Category 3
-----	Met. Corr. 1	Corrosive to metals, Category 1
-----	Skin Corr. 1A	Skin corrosion/irritation Category 1A
-----	STOT SE 3	Specific target organ toxicity (single exposure) Category 3
-----	H225	Highly flammable liquid and vapour
-----	H226	Flammable liquid and vapour
-----	H290	May be corrosive to metals
-----	H312	Harmful in contact with skin
-----	H314	Causes severe skin burns and eye damage
-----	H318	Causes serious eye damage
-----	H319	Causes serious eye irritation
-----	H336	May cause drowsiness or dizziness

The information presented herein is believed to be correct but is not purported to be all inclusive and shall be used only as a guide. AMSPEC Chemical shall not be held liable for any damage resulting from handling or from contact with the above product.