

Lemandarin Haze

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

1.1 Product Identifier

Product name: Lemandarin Haze

Product number: 401

CAS-No: Not applicable - Proprietary mixture of compounds

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

Identified uses: Flavor and fragrance ingredient

1.3 Details of the supplier of the safety data sheet

Company: The Werc Shop Laboratory, LLC

181 W Huntington Drive

Suite 106

Monrovia, CA, 91016

Phone: (714) 931-5806

Email: FineChem@TheWercShop.com

Website: www.TheWercShop.com

1.4 Emergency telephone number

Emergency Phone #: 1-888-641-6711

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Health hazards	Acute Oral Toxicity	Category 4
	Skin Irritation	Category 2
	Eye Irritation	Category 1
	Respiratory Sensitization	Category 1
	Skin Sensitization	Category 1
	Carcinogenicity	Category 2
	Aspiration Hazard	Category 1
Environmental hazards	Acute Aquatic Toxicity	Category 1
	Chronic Aquatic Toxicity	Category 1
Physical hazards	No GHS Physical hazards	

2.2 GHS Label elements, including precautionary statements

Signal Word: DANGER

Pictograms:



Hazard statement(s):

H302 Harmful if swallowed

H315 Causes skin irritation

H318 Causes serious eye damage

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

H317 May cause an allergic skin reaction

H351 Suspected of causing cancer <...by route of exposure if conclusively proven that no other route applies>

- H305 May be harmful if swallowed and enters airways
- H400 Very toxic to aquatic life
- H410 Very toxic to aquatic life with long lasting effects

Precautionary statement(s):

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash face, hands and any exposed skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- 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.
- P281 Use personal protective equipment as required.
- P285 In case of inadequate ventilation wear respiratory protection.
- P310 Immediately call a POISON CENTER or doctor/physician.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P330 Rinse mouth.
- P331 Do NOT induce vomiting.
- P362 Take off contaminated clothing and wash before reuse.
- P363 Wash contaminated clothing before reuse.
- P391 Collect spillage.
- P405 Store locked up.
- P501 Dispose of contents/container to an approved disposal facility.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

SECTION 3: Composition / information on ingredients

The ingredients and concentration of ingredients have been withheld as a trade secret.

CAS	Component	%
Trade Secret	Component 1 Acute Aquatic Toxicity (Category 1); H400 Aspiration Hazard (Category 1); H305 Skin Irritation (Category 2); H315 Skin Sensitization (Category 1); H317 Flammable Liquid (Category 3); H226 Chronic Aquatic Toxicity (Category 1); H410	25-44%
Trade Secret	Component 2 Acute Aquatic Toxicity (Category 1); H400 Chronic Aquatic Toxicity (Category 1); H410 Flammable Liquid (Category 4); H227	10-25%
Trade Secret	Component 3 Aspiration Hazard (Category 1); H305 Skin Irritation (Category 3); H316 Skin Sensitization (Category 1); H317	10-25%
Trade Secret	Component 4 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 3); H226	1.0-10%
Trade Secret	Component 5 Flammable Liquid (Category 3); H226	1.0-10%

Trade Secret	Component 6 Aspiration Hazard (Category 1); H305 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 Flammable Liquid (Category 3); H226	1.0-10%
Trade Secret	Component 7 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 4); H227	1.0-10%
Trade Secret	Component 8 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 Skin Sensitization (Category 1); H317 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 3); H226	1.0-10%
Trade Secret	Component 9 Aspiration Hazard (Category 1); H305 Skin Irritation (Category 2); H315 Skin Sensitization (Category 1); H317	1.0-10%
Trade Secret	Component 10 Acute Aquatic Toxicity (Category 1); H400 Chronic Aquatic Toxicity (Category 1); H410 Eye Irritation (Category 2A); H319	1.0-10%
Trade Secret	Component 11 Acute Aquatic Toxicity (Category 3); H402 Aspiration Hazard (Category 1); H305 Skin Irritation (Category 2); H315 Skin Sensitization (Category 1); H317 Flammable Liquid (Category 3); H226	1.0-10%
Trade Secret	Component 12 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335	Less than 1%
Trade Secret	Component 13 Eye Irritation (Category 2A); H319 Respiratory Sensitization (Category 1); H334 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 3); H226	Less than 1%
Trade Secret	Component 14 Acute Aquatic Toxicity (Category 2); H401 Chronic Aquatic Toxicity (Category 2); H411 Acute Oral Toxicity (Category 4); H302 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 Skin Sensitization (Category 1); H317 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 4); H227	Less than 1%
Trade Secret	Component 15 Acute Aquatic Toxicity (Category 2); H401 Chronic Aquatic Toxicity (Category 2); H411	Less than 1%

	Acute Oral Toxicity (Category 4); H302 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 3); H226	
Trade Secret	Component 16	Less than 1%
	Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 3); H226	
Trade Secret	Component 17	Less than 1%
	Aspiration Hazard (Category 1); H305	
Trade Secret	Component 18	Less than 1%
	Aspiration Hazard (Category 1); H305 Skin Irritation (Category 2); H315 Skin Sensitization (Category 1); H317 Flammable Liquid (Category 3); H226	
Trade Secret	Component 19	Less than 1%
	Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 4); H227	
Trade Secret	Component 20	Less than 1%
	Chronic Aquatic Toxicity (Category 2); H411 Skin Sensitization (Category 1); H317	
Trade Secret	Component 21	Less than 1%
	Flammable Liquid (Category 3); H226	
Trade Secret	Component 22	Less than 1%
	Chronic Aquatic Toxicity (Category 2); H411	
Trade Secret	Component 23	Less than 1%
	Chronic Aquatic Toxicity (Category 2); H411 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315	
Trade Secret	Component 24	Less than 1%
	Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 4); H227	
Trade Secret	Component 25	Less than 1%
	Acute Aquatic Toxicity (Category 3); H402 Chronic Aquatic Toxicity (Category 3); H412 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335	
Trade Secret	Component 26	Less than 1%
	Acute Aquatic Toxicity (Category 1); H400 Chronic Aquatic Toxicity (Category 1); H410 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315	
Trade Secret	Component 27	Less than 1%
	Acute Aquatic Toxicity (Category 2); H401 Chronic Aquatic Toxicity (Category 2); H411	

	Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 Skin Sensitization (Category 1); H317	
Trade Secret	Component 28	Less than 1%
	Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 4); H227	
Trade Secret	Component 29	Less than 1%
	Flammable Liquid (Category 3); H226	
Trade Secret	Component 30	Less than 1%
	Acute Oral Toxicity (Category 4); H302 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 4); H227	
Trade Secret	Component 31	Less than 1%
	Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315	
Trade Secret	Component 32	Less than 1%
	Acute Aquatic Toxicity (Category 3); H402 Chronic Aquatic Toxicity (Category 3); H412 Skin Sensitization (Category 1); H317 Flammable Liquid (Category 2); H225	
Trade Secret	Component 33	Less than 1%
	Skin Irritation (Category 2); H315 Skin Sensitization (Category 1); H317	
Trade Secret	Component 34	Less than 1%
	Acute Aquatic Toxicity (Category 3); H402 Eye Irritation (Category 1); H318 Skin Irritation (Category 2); H315 Skin Sensitization (Category 1); H317	
Trade Secret	Component 35	Less than 1%
	Flammable Liquid (Category 1); H224	
Trade Secret	Component 36	Less than 1%
	Flammable Liquid (Category 3); H226	
Trade Secret	Component 37	Less than 1%
	Acute Aquatic Toxicity (Category 3); H402 Chronic Aquatic Toxicity (Category 3); H412 Acute Oral Toxicity (Category 4); H302 Carcinogenicity (Category 2); H351 Flammable Liquid (Category 4); H227	
Trade Secret	Component 38	Less than 1%
	Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335	
Trade Secret	Component 39	Less than 1%
	Acute Aquatic Toxicity (Category 3); H402 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315	
Trade Secret	Component 40	Less than 1%
	Acute Oral Toxicity (Category 4); H302 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315	

Trade Secret

STOT-SE (Category 3, Respiratory); H335
Flammable Liquid (Category 2); H225
Component 41
Skin Irritation (Category 2); H315
Flammable Liquid (Category 1); H224

Less than 1%

SECTION 4: First aid measures

4.1 Description of first-aid measures

Inhalation	If headache, irritation, nausea, or drowsiness occurs, move patient to a place with clear air. Ventilate. Obtain medical advice if symptoms persist.
Skin contact	Flush skin with plenty of soap and water for at least 5 minutes. Seek medical attention in the event of continuing irritation. Remove and wash contaminated clothing and shoes
Eye contact	Immediately rinse with running water for at least 5 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If irritation occurs, seek medical attention.
Ingestion	Rinse mouth with water. Never give anything by mouth to an unconscious person. If in doubt, contact a Poison Control Center or seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Important known symptoms and effects are described in section 2.2 and section 11.

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

Wash contact areas with water.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide

Unsuitable extinguishing media

Do not use a heavy water stream. The use of a heavy water stream may spread fire

5.2 Special hazards arising from the substance or mixture

This mixture is a flammable liquid and can produce flammable vapors.

Forms carbon oxides when combusted.

5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing for firefighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent migration into groundwater, sewers, or streams. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Contain spill if possible, using absorbent pads, pillows, loose sorbent, or solvent absorbent. Use non-sparking tools to mix absorbent with spilled material, then clean using shovel or vacuum cleaner safe from electrostatic discharge. Place the material in a container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

SECTION 7: Accidental release measures

7.1 Precautions for safe handling

Use in a well-ventilated area, using good industrial hygiene practices. Avoid contact with eyes, skin, and clothing, and wear proper PPE (see section 8). Keep away from sources of ignition - no smoking. Take measures to prevent build of electrostatic charge.

Conditions for safe storage, including any incompatibilities

Store material at ambient temperature and pressure. Keep away from sources of direct heat and moisture. Keep container tightly closed when not in use. Containers can retain product residue after being emptied. Always obey hazards warnings and handle empty containers as though they were full. Avoid contact with oxidizing agents, reducing agents and strong bases.

Specific end use(s)

Apart for the uses mentioned in section 1.2 no other specific uses are stipulated. It is the user's responsibility to ensure that the use of the product conforms with local laws and regulations.

SECTION 8: Exposure controls / personal protection**8.1 Control Parameters**

Chemical	Type	Limit	Country	Source
α-Pinene	TWA	20.0 ppm	USA	ACGIH Threshold Limit Values
Camphor	TWA	2.0 mg/m ³	USA	Occupational Exposure Limits (OSHA) – Table Z-1
Camphor	TWA	2.0 PPM	USA	ACGIH Threshold Limit Values
Camphor	STEL	3.0 PPM	USA	ACGIH Threshold Limit Values
Camphor	TWA	2.0 mg/m ³	USA	NIOSH Recommended Exposure Limits
3-Carene	TWA	20.0 PPM	USA	ACGIH Threshold Limit Values
Limonene	TWA	20.0 PPM	USA	ACGIH Threshold Limit Values
Citral	TWA	5.0 PPM	USA	ACGIH Threshold Limit Values

8.2 Exposure controls**Appropriate engineering controls**

Provide local exhaust ventilation to keep airborne concentrations below the recommended occupational exposure limits

Personal Protective Equipment**Eye / face protection:**

Safety glasses with side shields or safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU).

Skin protection:

Handle with chemical resistant gloves (e.g. nitrile, latex, butyl rubber). Gloves must be inspected before use. Use proper glove removal technique.

Body protection:

Impervious clothing appropriate for the situation. For example a laboratory coat and chemical resistant shoes or shoe covers when handling small to medium quantities. Use long sleeves and long pants at a minimum.

Respiratory protection:

If concentrations are above the occupational exposure limits, an approved respirator should be used (air-purifying or air supplied).

Control of environmental exposure:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

SECTION 9: Physical and chemical properties

Appearance	Clear
Physical State	Liquid
Odor Threshold	N/A
Particle Size	N/A
Spec Gravity/Density	N/A
Viscosity	No data available.
Boiling Point	220-340 C
Partition Coefficient	No data available.
Vapor Pressure	No data available.
pH	No data available.
Evap. Rate	No data available.

Decomposition Temp	No data available.
Odor	No data available.
Solubility	No data available.
Freezing/Melting Pt.	No data available.
Flash Point	No data available.
Vapor Density	No data available.
Partition Coefficient: n-Octanol/Water	No data available.
Auto-Ignition Temp	No data available.
UFL/LFL	No data available.
Flammability	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical Stability

Stable under normal use / storage conditions

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Heat, flames, sparks and high temperatures.

10.5 Incompatible materials

Oxidizing agents, reducing agents and strong bases.

10.6 Hazardous decomposition products

May liberate carbon oxides during a fire.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No data available.

Skin corrosion / irritation

No data available.

Serious eye damage / eye irritation

No data available.

Respiratory or skin sensitization

May cause respiratory and skin sensitization

Germ cell mutagenicity

No data available.

Carcinogenicity

This mixture is known to contain Myrcene at a concentration of >0.1%. Myrcene is an IARC 2B compound. IARC 2B compounds are rated as possibly carcinogenic to humans.

Reproductive toxicity

No data available.

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated exposure

No data available.

Aspiration hazard

Aspiration hazard. May cause pulmonary edema and pneumonitis

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Environmental toxicity

Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Disposal considerations

Liquid organic waste stream. Follow all applicable local, state, and federal disposal regulations. Ensure disposal into adequate flammable liquid waste container. Do not waste into sinks or drains directly.

SECTION 14: Transport information

14.1 No data available.

SECTION 15: Regulatory information

This blend contains compounds mentioned in the following regulations

Territory: USA - California

Proposition 65 Pulegone

Territory: USA - California

Proposition 65 Myrcene

SECTION 16: Other information

16.1 Abbreviations

PEL:	Permissible exposure limit
TWA:	Time weighted average
TLV:	Threshold limit value
STEL:	Short term exposure limit
IDLH:	Immediately dangerous to life and health
OSHA:	Occupational Safety and Health Administration
ACGIH:	American Conference of Governmental Industrial Hygienists
NIOSH:	National Institute for Occupational Safety and Health
N/A:	Not applicable
IC50:	Lethal concentration to 50% of test subjects
LD50:	Lethal dose to 50% of test subjects
STOT-SE:	Specific target organ toxicity (single exposure)
STOT-RE:	Specific target organ toxicity (repeated exposure)
EC50:	Effective concentration that causes 50% of response from test subjects
ErC50:	EC50 in terms of growth rate reduction
CERCLA:	Comprehensive Environmental Response, Compensation and Liability Act
SARA:	Superfund Amendments and Reauthorization Act
TSCA:	Toxic Substances Control Act
DSL:	Domestic Substances List
NDSL:	Non-Domestic Substances List

16.2 Disclaimer

This SDS complies with 29 CFR 1910.1200 (THE HAZARD COMMUNICATION STANDARD, USA) and GHS. Although the information and recommendations set forth herein (hereinafter 'information') are presented in good faith and believed to be correct as of the date hereof, The Werc Shop Laboratory, LLC makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will The Werc Shop Laboratory, LLC be responsible for damages of any nature whatsoever resulting from the use of, misuse or reliance upon information. No representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to information or the product to which information refers. Regulatory requirements are subject to change and may differ from one location to another. It is the buyer's responsibility to ensure its activities comply with federal, state or provincial and local laws and regulations.