

## Blueberry Jack

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

#### 1.1 Product Identifier

Product name: Blueberry Jack

Product number: 359

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):**

<b>Health hazards</b>	Acute Oral Toxicity	Category 4
	Acute Dermal Toxicity	Category 3
	Skin Irritation	Category 1A
	Eye Irritation	Category 1
	Respiratory Sensitization	Category 1
	Skin Sensitization	Category 1
	Aspiration Hazard	Category 1
<b>Environmental hazards</b>	Acute Aquatic Toxicity	Category 1
	Chronic Aquatic Toxicity	Category 1
<b>Physical hazards</b>	No GHS Physical hazards	

#### 2.2 GHS Label elements, including precautionary statements

Signal Word: DANGER

Pictograms:



**Hazard statement(s):**

H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317	May cause an allergic skin reaction

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):**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
 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.  
 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.  
 P322 Specific measures (see supplemental first aid instructions on this label).  
 P330 Rinse mouth.  
 P331 Do NOT induce vomiting.  
 P361 Remove/Take off immediately all contaminated clothing.  
 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**

This product contains phytol. While allergies to phytol have not been identified, patients with Refsum disease should not consume this product to avoid serious complications.

---

**SECTION 3: Composition / information on ingredients**

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

CAS	Component	%
Trade Secret	<b>Component 1</b> Acute Aquatic Toxicity (Category 1); H400 Chronic Aquatic Toxicity (Category 1); H410 Flammable Liquid (Category 4); H227	25-44%
Trade Secret	<b>Component 2</b> Acute Oral Toxicity (Category 4); H302	1.0-10%
Trade Secret	<b>Component 3</b> Aspiration Hazard (Category 1); H305 Skin Irritation (Category 3); H316 Skin Sensitization (Category 1); H317	1.0-10%
Trade Secret	<b>Component 4</b> Flammable Liquid (Category 3); H226	1.0-10%
Trade Secret	<b>Component 5</b> 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	<b>Component 6</b> Acute Aquatic Toxicity (Category 1); H400 Chronic Aquatic Toxicity (Category 1); H410 Eye Irritation (Category 2A); H319	1.0-10%
Trade Secret	<b>Component 7</b>	1.0-10%

	Aspiration Hazard (Category 1); H305 Skin Irritation (Category 2); H315 Skin Sensitization (Category 1); H317	
<b>Trade Secret</b>	<b>Component 8</b>	<b>1.0-10%</b>
	Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 4); H227	
<b>Trade Secret</b>	<b>Component 9</b>	<b>1.0-10%</b>
	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	
<b>Trade Secret</b>	<b>Component 10</b>	<b>1.0-10%</b>
	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	
<b>Trade Secret</b>	<b>Component 11</b>	<b>1.0-10%</b>
	Acute Oral Toxicity (Category 4); H302 Eye Irritation (Category 1); H318 Skin Irritation (Category 1B); H314 Flammable Liquid (Category 4); H227	
<b>Trade Secret</b>	<b>Component 12</b>	<b>1.0-10%</b>
	Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 3); H226	
<b>Trade Secret</b>	<b>Component 13</b>	<b>1.0-10%</b>
	Skin Sensitization (Category 1); H317	
<b>Trade Secret</b>	<b>Component 14</b>	<b>1.0-10%</b>
	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	
<b>Trade Secret</b>	<b>Component 15</b>	<b>1.0-10%</b>
	Skin Sensitization (Category 1); H317	
<b>Trade Secret</b>	<b>Component 16</b>	<b>1.0-10%</b>
	Aspiration Hazard (Category 1); H305	
<b>Trade Secret</b>	<b>Component 17</b>	<b>1.0-10%</b>
	Chronic Aquatic Toxicity (Category 1); H410 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	
<b>Trade Secret</b>	<b>Component 18</b>	<b>1.0-10%</b>
	Aspiration Hazard (Category 1); H305 Skin Irritation (Category 2); H315	

Trade Secret	<p>Skin Sensitization (Category 1); H317          Flammable Liquid (Category 3); H226</p> <p><b>Component 19</b></p> <p>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          STOT-SE (Category 3, Respiratory); H335          Flammable Liquid (Category 3); H226</p>	1.0-10%
Trade Secret	<p><b>Component 20</b></p> <p>Eye Irritation (Category 2A); H319          Skin Irritation (Category 2); H315          STOT-SE (Category 3, Respiratory); H335          Flammable Liquid (Category 3); H226</p>	Less than 1%
Trade Secret	<p><b>Component 21</b></p> <p>Skin Irritation (Category 2); H315          Flammable Liquid (Category 3); H226</p>	Less than 1%
Trade Secret	<p><b>Component 22</b></p> <p>Eye Irritation (Category 2A); H319          Skin Irritation (Category 2); H315          STOT-SE (Category 3, Respiratory); H335</p>	Less than 1%
Trade Secret	<p><b>Component 23</b></p> <p>Eye Irritation (Category 2A); H319          Skin Irritation (Category 2); H315          STOT-SE (Category 3, Respiratory); H335          Flammable Liquid (Category 3); H226</p>	Less than 1%
Trade Secret	<p><b>Component 24</b></p> <p>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</p>	Less than 1%
Trade Secret	<p><b>Component 25</b></p> <p>Eye Irritation (Category 2A); H319          Flammable Liquid (Category 3); H226</p>	Less than 1%
Trade Secret	<p><b>Component 26</b></p> <p>Eye Irritation (Category 2A); H319          Skin Irritation (Category 2); H315          STOT-SE (Category 3, Respiratory); H335          Flammable Liquid (Category 3); H226</p>	Less than 1%
Trade Secret	<p><b>Component 27</b></p> <p>Eye Irritation (Category 2A); H319          Skin Irritation (Category 2); H315          STOT-SE (Category 3, Respiratory); H335          Flammable Liquid (Category 4); H227</p>	Less than 1%
Trade Secret	<p><b>Component 28</b></p> <p>Chronic Aquatic Toxicity (Category 2); H411</p>	Less than 1%
Trade Secret	<p><b>Component 29</b></p> <p>Chronic Aquatic Toxicity (Category 2); H411          Skin Sensitization (Category 1); H317</p>	Less than 1%
Trade Secret	<p><b>Component 30</b></p>	Less than 1%

	Eye Irritation (Category 1); H318 Skin Irritation (Category 2); H315	
<b>Trade Secret</b>	<b>Component 31</b> Acute Dermal Toxicity (Category 3); H311 Acute Oral Toxicity (Category 4); H302 Skin Sensitization (Category 1); H317 Flammable Liquid (Category 3); H226	<b>Less than 1%</b>
<b>Trade Secret</b>	<b>Component 32</b> Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 3); H226	<b>Less than 1%</b>
<b>Trade Secret</b>	<b>Component 33</b> Acute Aquatic Toxicity (Category 1); H400 Chronic Aquatic Toxicity (Category 1); H410 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315	<b>Less than 1%</b>
<b>Trade Secret</b>	<b>Component 34</b> Eye Irritation (Category 1); H318 Skin Irritation (Category 1A); H314 Flammable Liquid (Category 3); H226	<b>Less than 1%</b>
<b>Trade Secret</b>	<b>Component 35</b> Flammable Liquid (Category 3); H226	<b>Less than 1%</b>
<b>Trade Secret</b>	<b>Component 36</b> Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 4); H227	<b>Less than 1%</b>
<b>Trade Secret</b>	<b>Component 37</b> 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	<b>Less than 1%</b>
<b>Trade Secret</b>	<b>Component 38</b> Flammable Liquid (Category 3); H226	<b>Less than 1%</b>
<b>Trade Secret</b>	<b>Component 39</b> Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335	<b>Less than 1%</b>
<b>Trade Secret</b>	<b>Component 40</b> Chronic Aquatic Toxicity (Category 3); H412 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 3); H226	<b>Less than 1%</b>
<b>Trade Secret</b>	<b>Component 41</b> Acute Aquatic Toxicity (Category 1); H400 Chronic Aquatic Toxicity (Category 1); H410 Skin Irritation (Category 2); H315	<b>Less than 1%</b>
<b>Trade Secret</b>	<b>Component 42</b> Acute Aquatic Toxicity (Category 3); H402	<b>Less than 1%</b>

	Chronic Aquatic Toxicity (Category 3); H412 Eye Irritation (Category 2A); H319 Skin Irritation (Category 2); H315 STOT-SE (Category 3, Respiratory); H335 Flammable Liquid (Category 3); H226	
<b>Trade Secret</b>	<b>Component 43</b>	<b>Less than 1%</b>
	Acute Aquatic Toxicity (Category 3); H402 Chronic Aquatic Toxicity (Category 3); H412 Skin Sensitization (Category 1); H317 Flammable Liquid (Category 2); H225	
<b>Trade Secret</b>	<b>Component 44</b>	<b>Less than 1%</b>
	Flammable Liquid (Category 1); H224	
<b>Trade Secret</b>	<b>Component 45</b>	<b>Less than 1%</b>
	Acute Oral Toxicity (Category 4); H302	

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

<b>Inhalation</b>	If headache, irritation, nausea, or drowsiness occurs, move patient to a place with clear air. Ventilate. Obtain medical advice if symptoms persist.
<b>Skin contact</b>	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
<b>Eye contact</b>	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.
<b>Ingestion</b>	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
Acetic acid	TWA	10.0 PPM	USA	ACGIH Threshold Limit Values
Acetic acid	STEL	15.0 PPM	USA	ACGIH Threshold Limit Values
Acetic acid	ST	15.0 PPM	USA	NIOSH Recommended Exposure Limits
Acetic acid	ST	37.0 mg/m <sup>3</sup>	USA	NIOSH Recommended Exposure Limits
Acetic acid	TWA	10.0 PPM	USA	NIOSH Recommended Exposure Limits
Acetic acid	TWA	25.0 mg/m <sup>3</sup>	USA	NIOSH Recommended Exposure Limits
Acetic acid	TWA	10.0 PPM	USA	Occupational Exposure Limits (OSHA) – Table Z-1
Acetic acid	TWA	25.0 mg/m <sup>3</sup>	USA	Occupational Exposure Limits (OSHA) – Table Z-1
α-Pinene	TWA	20.0 ppm	USA	ACGIH Threshold Limit Values
3-Carene	TWA	20.0 PPM	USA	ACGIH Threshold Limit Values
Limonene	TWA	20.0 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

<b>Appearance</b>	Clear
<b>Physical State</b>	Liquid
<b>Odor Threshold</b>	N/A
<b>Particle Size</b>	N/A
<b>Spec Gravity/Density</b>	N/A
<b>Viscosity</b>	No data available.
<b>Boiling Point</b>	220-340 C
<b>Partition Coefficient</b>	No data available.
<b>Vapor Pressure</b>	No data available.
<b>pH</b>	No data available.
<b>Evap. Rate</b>	No data available.
<b>Decomposition Temp</b>	No data available.
<b>Odor</b>	No data available.
<b>Solubility</b>	No data available.
<b>Freezing/Melting Pt.</b>	No data available.
<b>Flash Point</b>	No data available.
<b>Vapor Density</b>	No data available.
<b>Partition Coefficient: n-Octanol/Water</b>	No data available.
<b>Auto-Ignition Temp</b>	No data available.
<b>UFL/LFL</b>	No data available.
<b>Flammability</b>	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 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

<b>N/A:</b>	Not applicable
<b>IC50:</b>	Lethal concentration to 50% of test subjects
<b>LD50:</b>	Lethal dose to 50% of test subjects
<b>STOT-SE:</b>	Specific target organ toxicity (single exposure)
<b>STOT-RE:</b>	Specific target organ toxicity (repeated exposure)
<b>EC50:</b>	Effective concentration that causes 50% of response from test subjects
<b>ErC50:</b>	EC50 in terms of growth rate reduction
<b>CERCLA:</b>	Comprehensive Environmental Response, Compensation and Liability Act
<b>SARA:</b>	Superfund Amendments and Reauthorization Act
<b>TSCA:</b>	Toxic Substances Control Act
<b>DSL:</b>	Domestic Substances List
<b>NDSL:</b>	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.