

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/08/2018

Reviewed on 10/08/2018

## 1 Identification

- **Product identifier**
- **Trade name:** JUNIPER FLAVOR EXTRACT, NATURAL
- **Article number / sku:** 97.723 / AJAF
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
OliveNation LLC  
13 Robbie Road  
Suite A4  
Avon, MA 02322
- **Information department:** Regulatory department
- **Emergency telephone number:**  
During normal opening times: Call Chemtrec Day or Night  
Domestic North America 800.424.9300/International 703.527.3887 (Collect calls accepted)

## 2 Hazard(s) identification

- **Classification of the substance or mixture**

 GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

---

 GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

---

Eye Irrit. 2B H320 Causes eye irritation.

---

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**

GHS02 GHS07

- **Signal word** Danger

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/08/2018

Reviewed on 10/08/2018

**Trade name: JUNIPER FLAVOR EXTRACT, NATURAL**

(Contd. of page 1)

· **Hazard-determining components of labeling:**

ethyl alcohol

JUNIPER BERRY OIL

· **Hazard statements**

*Highly flammable liquid and vapor.**Causes skin and eye irritation.**May cause an allergic skin reaction.**May cause respiratory irritation.*

· **Precautionary statements**

*Keep away from heat/sparks/open flames/hot surfaces. - No smoking.**Ground/bond container and receiving equipment.**Use explosion-proof electrical/ventilating/lighting/equipment.**Use only non-sparking tools.**Take precautionary measures against static discharge.**Avoid breathing dust/fume/gas/mist/vapors/spray**Wash thoroughly after handling.**Use only outdoors or in a well-ventilated area.**Contaminated work clothing must not be allowed out of the workplace.**Wear protective gloves/protective clothing/eye protection/face protection.**If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.**IF INHALED: Remove person to fresh air and keep comfortable for breathing.**If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.**Continue rinsing.**Call a poison center/doctor if you feel unwell.**Specific treatment (see on this label).**If skin irritation or rash occurs: Get medical advice/attention.**If eye irritation persists: Get medical advice/attention.**Take off contaminated clothing and wash it before reuse.**Wash contaminated clothing before reuse.**In case of fire: Use for extinction: CO2, powder or water spray.**Store in a well-ventilated place. Keep container tightly closed.**Store in a well-ventilated place. Keep cool.**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 3

Reactivity = 0

(Contd. on page 3)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/08/2018

Reviewed on 10/08/2018

**Trade name: JUNIPER FLAVOR EXTRACT, NATURAL**

(Contd. of page 2)

· **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = 1
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

57-55-6	PROPYLENE GLYCOL	50-100%
64-17-5	ethyl alcohol	25-50%
<small>⚠ Flam. Liq. 2, H225; ⚠ Skin Irrit. 2, H315; ⚠ STOT SE 3, H335; ⚠ Eye Irrit. 2B, H320</small>		
8002-68-4	JUNIPER BERRY OIL	≥1-<2.5%
<small>⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ Skin Sens. 1, H317</small>		

### 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:**  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

US

(Contd. on page 4)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/08/2018

Reviewed on 10/08/2018

**Trade name: JUNIPER FLAVOR EXTRACT, NATURAL**

(Contd. of page 3)

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.

(Contd. on page 5)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/08/2018

Reviewed on 10/08/2018

**Trade name: JUNIPER FLAVOR EXTRACT, NATURAL**

(Contd. of page 4)

- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.  
At this time, the remaining constituent has no known exposure limits.

#### 57-55-6 PROPYLENE GLYCOL

WEEL	Long-term value: 10 mg/m <sup>3</sup>
------	---------------------------------------

#### 64-17-5 ethyl alcohol

PEL	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
REL	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
TLV	Short-term value: 1880 mg/m <sup>3</sup> , 1000 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**

**S** Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the

(Contd. on page 6)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/08/2018

Reviewed on 10/08/2018

**Trade name: JUNIPER FLAVOR EXTRACT, NATURAL**

(Contd. of page 5)

resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

**R**

Tightly sealed goggles

### 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Liquid  
**Color:** According to product specification

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** 78 °C (172.4 °F)

· **Flash point:** 22.8 °C (73 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 371 °C (699.8 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits:**

**Lower:** 2.6 Vol %

**Upper:** 15 Vol %

· **Vapor pressure at 20 °C (68 °F):** 59 hPa (44.3 mm Hg)

(Contd. on page 7)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/08/2018

Reviewed on 10/08/2018

**Trade name: JUNIPER FLAVOR EXTRACT, NATURAL**

(Contd. of page 6)

· <b>Density at 20 °C (68 °F):</b>	0.92495 g/cm <sup>3</sup> (7.71871 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	98.0 %
<b>VOC content:</b>	98.00 %
	906.5 g/l / 7.56 lb/gl
· <b>Solids content:</b>	0.0 %
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.

(Contd. on page 8)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/08/2018

Reviewed on 10/08/2018

**Trade name: JUNIPER FLAVOR EXTRACT, NATURAL**

(Contd. of page 7)

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

64-17-5	ethyl alcohol	1
---------	---------------	---

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

(Contd. on page 9)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/08/2018

Reviewed on 10/08/2018

**Trade name: JUNIPER FLAVOR EXTRACT, NATURAL**

(Contd. of page 8)

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

<ul style="list-style-type: none"> <li>· <b>UN-Number</b></li> <li>· <b>DOT, IMDG, IATA</b></li> </ul>	<p style="margin: 0;">UN1197</p>
<ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>DOT</b></li> <li>· <b>IMDG, IATA</b></li> </ul>	<p style="margin: 0;">Extracts, flavoring, liquid EXTRACTS, FLAVOURING, LIQUID</p>
<ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b></li> <li>· <b>DOT</b></li> </ul>	<p style="margin: 0;">3 Flammable liquids</p>
<ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>	<p style="margin: 0;">3 3</p>
<ul style="list-style-type: none"> <li>· <b>IMDG, IATA</b></li> </ul>	<p style="margin: 0;">3 Flammable liquids</p>
<ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>	<p style="margin: 0;">3 3</p>
<ul style="list-style-type: none"> <li>· <b>Packing group</b></li> <li>· <b>DOT, IMDG, IATA</b></li> </ul>	<p style="margin: 0;">III</p>
<ul style="list-style-type: none"> <li>· <b>Environmental hazards:</b></li> <li>· <b>Marine pollutant:</b></li> </ul>	<p style="margin: 0;">No</p>
<ul style="list-style-type: none"> <li>· <b>Special precautions for user</b></li> <li>· <b>Danger code (Kemler):</b></li> <li>· <b>EMS Number:</b></li> <li>· <b>Stowage Category</b></li> </ul>	<p style="margin: 0;">Warning: Flammable liquids 33 F-E,S-D B</p>
<ul style="list-style-type: none"> <li>· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b></li> </ul>	<p style="margin: 0;">Not applicable.</p>

(Contd. on page 10)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/08/2018

Reviewed on 10/08/2018

**Trade name: JUNIPER FLAVOR EXTRACT, NATURAL**

(Contd. of page 9)

**· Transport/Additional information:**

**· DOT**

**· Quantity limitations**

*On passenger aircraft/rail: 5 L*

*On cargo aircraft only: 60 L*

**· IMDG**

**· Limited quantities (LQ)**

*5L*

**· Excepted quantities (EQ)**

*Code: E2*

*Maximum net quantity per inner packaging: 30 ml*

*Maximum net quantity per outer packaging: 500 ml*

**· UN "Model Regulation":**

*UN 1197 EXTRACTS, FLAVORING, LIQUID, 3, III*

### 15 Regulatory information

**· Safety, health and environmental regulations/legislation specific for the substance or mixture**

**· Sara**

**· Section 355 (extremely hazardous substances):**

*None of the ingredients is listed.*

**· Section 313 (Specific toxic chemical listings):**

*None of the ingredients is listed.*

**· TSCA (Toxic Substances Control Act) (Substances not listed):**

*All ingredients are listed.*

**· TSCA new (21st Century Act) (Substances not listed)**

8002-68-4 JUNIPER BERRY OIL

**· Proposition 65**

**· Chemicals known to cause cancer:**

*None of the ingredients is listed.*

**· Chemicals known to cause reproductive toxicity for females:**

*None of the ingredients is listed.*

**· Chemicals known to cause reproductive toxicity for males:**

*None of the ingredients is listed.*

**· Chemicals known to cause developmental toxicity:**

64-17-5 ethyl alcohol

(Contd. on page 11)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/08/2018

Reviewed on 10/08/2018

**Trade name: JUNIPER FLAVOR EXTRACT, NATURAL**

(Contd. of page 10)

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

64-17-5 ethyl alcohol

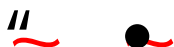
A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02 GHS07

· **Signal word** Danger

· **Hazard-determining components of labeling:**

ethyl alcohol

JUNIPER BERRY OIL

· **Hazard statements**

Highly flammable liquid and vapor.

Causes skin and eye irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

· **Precautionary statements**

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

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Call a poison center/doctor if you feel unwell.

(Contd. on page 12)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/08/2018

Reviewed on 10/08/2018

**Trade name: JUNIPER FLAVOR EXTRACT, NATURAL**

(Contd. of page 11)

*Specific treatment (see on this label).*

*If skin irritation or rash occurs: Get medical advice/attention.*

*If eye irritation persists: Get medical advice/attention.*

*Take off contaminated clothing and wash it before reuse.*

*Wash contaminated clothing before reuse.*

*In case of fire: Use for extinction: CO2, powder or water spray.*

*Store in a well-ventilated place. Keep container tightly closed.*

*Store in a well-ventilated place. Keep cool.*

*Store locked up.*

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

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Relevant phrases**

*H225 Highly flammable liquid and vapor.*

*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.*

*H320 Causes eye irritation.*

*H335 May cause respiratory irritation.*

· **Department issuing SDS:** Regulatory department

· **Date of preparation / last revision** 10/08/2018 / 1

· **Abbreviations and acronyms:**

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*ACGIH: American Conference of Governmental Industrial Hygienists*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*VOC: Volatile Organic Compounds (USA, EU)*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*NIOSH: National Institute for Occupational Safety*

*OSHA: Occupational Safety & Health*

(Contd. on page 13)

**Safety Data Sheet**  
**acc. to OSHA HCS**

Printing date 10/08/2018

Reviewed on 10/08/2018

**Trade name: JUNIPER FLAVOR EXTRACT, NATURAL**

(Contd. of page 12)

*TLV: Threshold Limit Value*

*PEL: Permissible Exposure Limit*

*REL: Recommended Exposure Limit*

*Flam. Liq. 2: Flammable liquids – Category 2*

*Flam. Liq. 3: Flammable liquids – Category 3*

*Skin Irrit. 2: Skin corrosion/irritation – Category 2*

*Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B*

*Skin Sens. 1: Skin sensitisation – Category 1*

*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*

*Asp. Tox. 1: Aspiration hazard – Category 1*

· **\* Data compared to the previous version altered.**