Printing date 06/26/2020 Reviewed on 06/26/2020

1 Identification

· Product identifier

· Trade name: BLUEBERRY FLAVOR OIL (NAT-WONF O.S.)

· Article number: 08.705

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

OliveNation LLC 13 Robbie Road Suite A4 Avon, MA 02322 617-580-3667

· 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. 3 H226 Flammable liquid and vapor.



GHS07

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

- · Label elements
- · GHS label elements

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

· Hazard pictograms





GHS02 GHS07

- · Signal word Warning
- · Hazard-determining components of labeling:

BOIS DE ROSE ORANGE OIL CITRAL LINALOOL

OIL LIME EXPRESSED W.I.

(Contd. on page 2)

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Trade name: BLUEBERRY FLAVOR OIL NAT-WONF O.S.

(Contd. of page 1)

· Hazard statements

Flammable liquid and vapor.

May cause an allergic skin reaction.

· Precautionary statements

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

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

Keep container tightly closed.

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

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.

Specific treatment (see on this label).

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

Wash contaminated clothing before reuse.

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

Store in a well-ventilated place. Keep cool.

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

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0

Fire = 2

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0

Fire = 2

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.

(Contd. on page 3)

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Trade name: BLUEBERRY FLAVOR OIL NAT-WONF O.S.

(Contd. of page 2) · Dangerous components: 105-54-4 ETHYL BUTYRATE ≥0.1-<2.5% 🏵 Flam. Liq. 3, H226; 🕚 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335-H336 87-44-5 CARYOPHYLLENE ≥0.1-<2.5% **&** Asp. Tox. 1, H304 141-78-6 ETHYL ACETATE ≥0.1-<2.5% 🏵 Flam. Liq. 2, H225; 🚺 Eye Irrit. 2A, H319; STOT SE 3, H336 8015-77-8 BOIS DE ROSE ≥0.1-≤1% 🕩 Skin Irrit. 2, H315; Skin Sens. 1, H317; Flam. Liq. 4, H227 8008-57-9 ORANGE OIL ≥0.1-≤1% 🏵 Flam. Liq. 3, H226; 😵 Asp. Tox. 1, H304; 🕦 Skin Irrit. 2, H315; Skin Sens. 1, H317 5392-40-5 CITRAL ≥0.1-≤1% 🚸 Skin Irrit. 2, H315; Skin Sens. 1, H317; Flam. Liq. 4, H227 78-70-6 *LINALOOL* ≥0.1-≤1% (!) Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; Flam. Lig. 4, H227 8008-26-2 OIL LIME EXPRESSED W.I. ≥0.1-≤1% ♦ Flam. Liq. 3, H226; ♦ Asp. Tox. 1, H304; ♦ Skin Irrit. 2, H315; Skin Sens. 1,

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.
- · 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.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· For safety reasons unsuitable extinguishing agents: Water with full jet

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(Contd. of page 3)

- · 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: 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 tightly sealed containers in a cool, dry place that is well ventilated. Away from heat, spark, and open flame.

- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.
- · 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 other constituents have no known exposure limits.

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141-78-6 ETHYL ACETATE

PEL Long-term value: 1400 mg/m³, 400 ppm REL Long-term value: 1400 mg/m³, 400 ppm TLV Long-term value: 1440 mg/m³, 400 ppm

5392-40-5 CITRAL

TLV Long-term value: 32* mg/m³, 5* ppm Skin; DSEN; *inhalable fraction + vapor

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

· Breathing equipment:

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

· Protection of hands:



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 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:



Tightly sealed goggles

-US

*

Safety Data Sheet acc. to OSHA HCS

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(Contd. of page 5)

Physical and chemical propert	ties	
Information on basic physical and	chemical properties	
General Information		
Appearance:		
Form:	Fluid	
Color: Odor:	According to product specification Characteristic	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
-		
Change in condition Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
01	57.2 °C (135 °F)	
Flash point:		
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:		
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not determined.	
Density at 20 °C (68 °F):	$0.92027 \ g/cm^3 \ (7.67965 \ lbs/gal)$	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/wat	t er): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	1.3 %	
VOC content:	1.32 %	
	12.2 g/l / 0.10 lb/gl	

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(Contd. of page 6)

· Other information

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: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · 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)				
140-11-4	BENZYL ACETATE	3		
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.

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Trade name: BLUEBERRY FLAVOR OIL NAT-WONF O.S.

(Contd. of page 7)

- · *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.

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 \cdot **DOT** not regulated

· IMDG, IATA UN1197

· UN proper shipping name

 \cdot **DOT** not regulated

· IMDG, IATA EXTRACTS, FLAVOURING, LIQUID

3

· Transport hazard class(es)

 $\cdot DOT$

· Class not regulated

· IMDG, IATA



· Class 3 Flammable liquids

· Label

· Packing group

 \cdot **DOT** not regulated

· IMDG, IATA III

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Trade name: BLUEBERRY FLAVOR OIL NAT-WONF O.S.

Contd. of page 8)

• Environmental hazards:

• Special precautions for user
• EMS Number:

• Transport in bulk according to Annex II of
MARPOL73/78 and the IBC Code

• 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)

8015-77-8 BOIS DE ROSE

8008-57-9 ORANGE 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

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

 140-11-4
 BENZYL ACETATE
 A4

 64-17-5
 ETHYL ALCOHOL
 A3

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Trade name: BLUEBERRY FLAVOR OIL NAT-WONF O.S.

(Contd. of page 9)

· 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 Warning
- · Hazard-determining components of labeling:

BOIS DE ROSE ORANGE OIL CITRAL

LINALOOL

OIL LIME EXPRESSED W.I.

· Hazard statements

Flammable liquid and vapor.

May cause an allergic skin reaction.

· Precautionary statements

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

Keep container tightly closed.

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

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.

Specific treatment (see on this label).

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

Wash contaminated clothing before reuse.

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

Store in a well-ventilated place. Keep cool.

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.

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Trade name: BLUEBERRY FLAVOR OIL NAT-WONF O.S.

(Contd. of page 10)

· Relevant phrases

H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor.

H227 Combustible liquid.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

· Department issuing SDS: Regulatory department

· Date of preparation / last revision 06/26/2020 / 2

· 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

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

Flam. Liq. 4: Flammable liquids - Category 4

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

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

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