1 Identification

· Product identifier

· Trade name: SWEET POTATO FLAVOR

Other means of identification

· Article number: BAKC / 74.815

Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

OliveNation LLC 13 Robbie Road A4 Avon, MA 02322 USA 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



GHS08 Health hazard

Carcinogenicity 1A H350 May cause cancer.



GHS07

Sensitization - skin 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





GHS07 GHS08

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

ETHYL ALCOHOL CARROT SEED OIL

· Hazard statements

May cause an allergic skin reaction.

May cause cancer.

Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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/hearing protection.

If on skin: Wash with plenty of water.

(Contd. on page 2)

Trade name: SWEET POTATO FLAVOR

(Contd. of page 1)

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

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

Store locked up.

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

- Information pertaining to particular dangers for man and environment:
- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0 Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *0 Fire = 1Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Classification according to (d)(1)(ii) of § 1910.1200

The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

· Hazards not otherwise classified

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

3 Composition/information on ingredients

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

_	components:	
57-55-6	Propylene glycol	>10-≤25%
	♦ Acute toxicity - oral 4, H302	
121-33-5	VANILLIN	≤2.5%
	♦ Acute toxicity - oral 4, H302; Eye irritation 2A, H319	
64-17-5	ETHYL ALCOHOL	≥0.1-≤2.5%
	🚸 Flammable liquids 2, H225; 🗞 Carcinogenicity 1A, H350	
	CARROT SEED OIL	≥0.1-<1%
	Flammable liquids 3, H226; Aspiration hazard 1, H304; Skin irritation 2, H315; Sensitization - skin 1, H317	

4 First-aid measures

- · Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air and to be sure call for a doctor.

(Contd. on page 3)

Trade name: SWEET POTATO FLAVOR (NAT-WONF)

(Contd. of page 2)

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.
- · 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.
- · 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 Not required.
- · 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).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· Protective Action Criteria for Chemicals

· PAC-1:		
57-55-6	Propylene glycol	30 mg/m³
112-80-1	oleic acid, pure	220 mg/m^3
64-17-5	ETHYL ALCOHOL	1,800 ppm
141-97-9	ETHYL ACETOACETATE	12 mg/m³
107-92-6	BUTYRIC ACID	1.4 ppm
1310-58-3	POTASSIUM HYDROXIDE	0.18 mg/m³
64-19-7	acetic acid	5 ppm
124-07-2	CAPRYLIC ACID	30 mg/m³
· PAC-2:		
57-55-6	Propylene glycol	$1,300 \text{ mg/m}^3$
112-80-1	oleic acid, pure	2,400 mg/m³
64-17-5	ETHYL ALCOHOL	3300* ppm
141-97-9	ETHYL ACETOACETATE	130 mg/m³
107-92-6	BUTYRIC ACID	66 mg/m3
1310-58-3	POTASSIUM HYDROXIDE	2 mg/m ³
64-19-7	acetic acid	35 ppm
124-07-2	CAPRYLIC ACID	330 mg/m³
		(Contd. on page 4)

Trade name: SWEET POTATO FLAVOR

(Contd. of page 3) · *PAC-3*: 57-55-6 Propylene glycol $7,900 \text{ mg/m}^3$ $15,000 \text{ mg/m}^3$ 112-80-1 oleic acid, pure 64-17-5 ETHYL ALCOHOL 15000* ppm 141-97-9 ETHYL ACETOACETATE 790 mg/m^3 107-92-6 BUTYRIC ACID 400 mg/m3 1310-58-3 POTASSIUM HYDROXIDE 54 mg/m³ 64-19-7 acetic acid 250 ppm 124-07-2 CAPRYLIC ACID $2,000 \text{ mg/m}^3$

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

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

- Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles:

Store in a 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 receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · 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/m³
121-33	R-5 VANILLIN
WEEL	Long-term value: 10 mg/m³
64-17-	5 ETHYL ALCOHOL
PEL	Long-term value: 1900 mg/m³, 1000 ppm
REL	Long-term value: 1900 mg/m³, 1000 ppm
TLV	Short-term value: 1000 ppm
	A3

· Additional information: The lists that were valid during the creation were used as basis.

Trade name: SWEET POTATO FLAVOR

(Contd. of page 4)

- · Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · 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.

Store protective clothing separately.

· 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:



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

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

chemical mixture.

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

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Physical state Liquid

· Color: According to product specification

Odor: Characteristic
 Odor threshold: Not determined.
 Melting point/Melting range: Undetermined.
 Boiling point/Boiling range: 100 °C (212 °F)
 Flammability: Not applicable.

· Explosion limits:

• Lower: 2.6 Vol %
• Upper: 12.6 Vol %

Flash point:
 Auto igniting:
 Decomposition temperature:
 pH-value:

>93 °C (>199.4 °F)
371 °C (699.8 °F)
Not determined.
Not determined.

(Contd. on page 6)

Trade name: SWEET POTATO FLAVOR

(Contd. of page 5)

· Viscosity:

• Kinematic: Not determined. • Dynamic: Not determined.

· Solubility in / Miscibility with

Water: Fully miscible.
Partition coefficient (n-octanol/water): Not determined.
Vapor pressure at 20 °C (68 °F): 23 hPa (17.3 mm Hg)

· Vapor pressure:

Density at 20 °C (68 °F): 1.01793 g/cm³ (8.49463 lbs/gal)

Relative density
 Vapor density
 Particle characteristics
 Not determined.
 Not applicable.

· Other information

· Appearance:

· Form: Liquid

· Important information on protection of health and

environment, and on safety.

• Ignition temperature: Product is not selfigniting.

• Danger of explosion: Product does not present an explosion hazard.

· Solvent content:

• Organic solvents: 17.5 %
 • Water: 78.0 %
 • VOC content: 17.55 %

178.6 g/l / 1.49 lb/gal

· Solids content: 2.7 %

· Change in condition

• Evaporation rate Not determined.

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:

 LD/LC50 values that are relevant for classification

ATE (Acute Toxicity Estimate)

Oral LD50 10,664 mg/kg (rat)

57-55-6 Propylene glycol

Oral	LD50	2,000 mg/kg (rat)
Dermal	LD50	20,800 mg/kg (rabbit)

(Contd. on page 7)

Trade name: SWEET POTATO FLAVOR

- · 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

- · Interactive effects No interactive effects between components are known.
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

Ethyl alcohol causes cancer when used in alcoholic beverages per IARC guidelines.

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.

· Alternative sources for toxicological information

No non-standard sources for toxicological information where used.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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 8)

Trade name: SWEET POTATO FLAVOR

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

(Contd. of page 7)

Transport information	
· UN-Number · DOT, IMDG, IATA	not regulated
· UN proper shipping name · DOT, IMDG, IATA	not regulated
· Transport hazard class(es)	
· DOT, ADN, IMDG, IATA · Class	not regulated
· Packing group · DOT, IMDG, IATA	not regulated
Environmental hazards:	Not applicable.
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
· Special precautions for user	Not applicable.
· UN "Model Regulation":	not regulated

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): All substances are active or exempt.
- · Hazardous Air Pollutants

None of the ingredients is listed.

- · Proposition 65
- · Chemicals known to cause cancer:

Ethyl alcohol causes cancer when used in alcoholic beverages per OEHHA guidelines.

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 9)

Trade name: SWEET POTATO FLAVOR

(Contd. of page 8)

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

64-17-5 ETHYL ALCOHOL

A3

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

None of the ingredients is listed.

· National regulations:

· Additional classification according to Decree on Hazardous Materials:

Carcinogenic hazardous material group III (dangerous).

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· 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.

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

Flammable liquids 2: Flammable liquids – Category 2

Flammable liquids 3: Flammable liquids – Category 3

Acute toxicity - oral 4: Acute toxicity - Category 4

Skin irritation 2: Skin corrosion/irritation – Category 2

Eye irritation 2A: Serious eye damage/eye irritation – Category 2A

Sensitization - skin 1: Skin sensitisation - Category 1

Carcinogenicity 1A: Carcinogenicity – Category 1A

Aspiration hazard 1: Aspiration hazard - Category 1

* Data compared to the previous version altered.