1 Identification

· Product identifier

· Trade name: BROWN SUGAR CINNAMON FLAVOR EXTRACT

· Article number: BAFH / 12.798GMOF

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



GHS02 Flame

Flammable Liquids 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Carcinogenicity 1A H350 May cause cancer.

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





GHS02

GHS08

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

ETHYL ALCOHOL

· Hazard statements

Highly flammable liquid and vapor.

May cause cancer.

· Precautionary statements

Obtain special instructions before use.

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

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.

(Contd. on page 2)

Trade name: BROWN SUGAR CINNAMON FLAVOR EXTRACT

(Contd. of page 1)

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 exposed or concerned: Get medical advice/attention.

In case of fire: Use CO2, powder or water spray to extinguish.

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 = 0 Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *0 Fire = 3Reactivity = 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:					
64-17-5	ETHYL ALCOHOL	🏇 Flammable Liquids 2, H225; & Carcinogenicity 1A, H350	>50-≤100%		
56-81-5	Glycerin		>2.5-≤10%		
121-33-5	VANILLIN	♦ Acute Toxicity - Oral 4, H302; Eye Irritation 2A, H319	≤2.5%		

4 First-aid measures

- · Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · 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.

US

Trade name: BROWN SUGAR CINNAMON FLAVOR EXTRACT

(Contd. of page 2)

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

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).

Dispose contaminated material as waste according to item 13.

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.

· Protective Action Criteria for Chemicals

· PAC-1:	
64-17-5 ETHYL ALCOHOL	1,800 ppn
56-81-5 Glycerin	45 mg/m ³
107-92-6 BUTYRIC ACID	1.4 ppm
112-80-1 oleic acid, pure	220 mg/m
64-19-7 ACETIC ACID	5 ppm
124-07-2 CAPRYLIC ACID	30 mg/m^3
· PAC-2:	,
64-17-5 ETHYL ALCOHOL	3300* ppm
56-81-5 Glycerin	180 mg/m^3
107-92-6 BUTYRIC ACID	16 ppm
112-80-1 oleic acid, pure	2,400 mg/m
64-19-7 ACETIC ACID	35 ppm
124-07-2 CAPRYLIC ACID	330 mg/m^3
· PAC-3:	,
64-17-5 ETHYL ALCOHOL	15000* ppm
56-81-5 Glycerin	$1,100 \text{ mg/m}^3$
107-92-6 BUTYRIC ACID	110 ppm
112-80-1 oleic acid, pure	15,000 mg/m
64-19-7 ACETIC ACID	250 ppm
	(Contd. on page

Trade name: BROWN SUGAR CINNAMON FLAVOR EXTRACT

 (Contd. of page 3)

 124-07-2 CAPRYLIC ACID
 2,000 mg/m³

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store in a cool location.

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.

Store in cool, dry conditions in well sealed receptacles.

· 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

Control parameters							
· Compo	· Components with limit values that require monitoring at the workplace:						
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						
56-81-	5 Glycerin						
PEL	Long-term value: 15* 5** mg/m³						
	mist; *total dust **respirable fraction						
TLV	TLV withdrawn-insufficient data human occup. exp.						
121-33	3-5 VANILLIN						
WEEL	Long-term value: 10 mg/m³						

- · 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.

Store protective clothing separately.

(Contd. on page 5)

Trade name: BROWN SUGAR CINNAMON FLAVOR EXTRACT

(Contd. of page 4)

· 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 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

9 Physical	l and ci	nemical	prop	pert	ies
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· Information on	basic t	าทงรเตส	and chemica	I nronerties

· 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: 16.7 °C (62.1 °F)
• Flammability (solid, gaseous): Highly flammable.

• Flammability (solid, gaseous): Highly flammability (solid, gaseous): 400 °C (752 °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: 3.5 Vol %

(Contd. on page 6)

Trade name: BROWN SUGAR CINNAMON FLAVOR EXTRACT

	(Contd. of page
Upper:	15 Vol %
Vapor pressure at 20 °C (68 °F):	59 hPa (44.3 mm Hg)
Density at 20 °C (68 °F):	0.84996 g/cm³ (7.09292 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/wate	er): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	90.0 %
Water:	4.4 %
VOC content:	84.49 %
	718.2 g/l / 5.99 lb/gal
Solids content:	2.4 %
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:
- · LD/LC50 values that are relevant for classification:

64-17-5 ETHYL ALCOHOL

Inhalative LC50/4 h 20,000 mg/l (rat)

- · Primary irritant effect:
- on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

(Contd. on page 7)

Trade name: BROWN SUGAR CINNAMON FLAVOR EXTRACT

(Contd. of page 6)

- · 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.

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 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.

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

14 Transport information

- · UN-Number
- · **DOT, IMDG, IATA** UN1197
- · UN proper shipping name
- **DOT** Extracts, flavoring, liquid
- · IMDG, IATA EXTRACTS, FLAVOURING, LIQUID

(Contd. on page 8)

Trade name: BROWN SUGAR CINNAMON FLAVOR EXTRACT

(Contd. of page 7)

٠	Trans	port	hazard	class	(es)	
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 $\cdot DOT$



· Class 3 Flammable liquids · Label 3

· IMDG, IATA



· Class 3 Flammable liquids

· Label 3

· Packing group

· **DOT, IMDG, IATA**

· Environmental hazards: Not applicable.

· Special precautions for user Warning: Flammable liquids

· Hazard identification number (Kemler code): 33 · EMS Number: F-E,S-D

· Stowage Category B

• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

 $\cdot DOT$

• Quantity limitations On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L

 \cdot 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, FLAVOURING, LIQUID, 3, II

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.

(Contd. on page 9)

Trade name: BROWN SUGAR CINNAMON FLAVOR EXTRACT

(Contd. of page 8)

· 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

· 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.

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





GHS02 GHS08

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

ETHYL ALCOHOL

· Hazard statements

Highly flammable liquid and vapor.

May cause cancer.

· Precautionary statements

Obtain special instructions before use.

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

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.

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 exposed or concerned: Get medical advice/attention.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

Store locked up.

(Contd. on page 10)

Trade name: BROWN SUGAR CINNAMON FLAVOR EXTRACT

(Contd. of page 9)

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

- · National regulations:
- · 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

Acute Toxicity - Oral 4: Acute toxicity - Category 4

Eye Irritation 2A: Serious eye damage/eye irritation - Category 2A

Carcinogenicity 1A: Carcinogenicity - Category 1A

* * Data compared to the previous version altered.

US