Safety Data Sheet
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1 Identification

· **Product identifier**

· **Trade name:** **MOCHA FLAVOR EXTRACT**

· **Article number:** BAFF / 21.499

· **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 3 H226 Flammable liquid and vapor.

GHS08 Health hazard

Carcinogenicity 1A H350 May cause cancer.

GHS07

Eye Irritation 2A H319 Causes serious eye irritation.
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**

GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
ETHYL ALCOHOL
2-furaldehyde
FURFURYL ALCOHOL
ISOVALERALDEHYDE
· **Hazard statements**
Flammable liquid and vapor.

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Causes serious eye irritation.
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.
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
Wash thoroughly after handling.
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 in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Wash contaminated clothing before reuse.
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 = 2
Fire = 3
Reactivity = 0

· ***HMIS-ratings (scale 0 - 4)***

*Health = *2*
Fire = 3
Reactivity = 0

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

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3 Composition/information on ingredients

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

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· **Dangerous components:**

57-55-6	PROPYLENE GLYCOL Acute Toxicity - Oral 4, H302	>25-≤50%
84649-99-0	Cocoa extract Eye Irritation 2A, H319	>10-≤25%
64-17-5	ETHYL ALCOHOL Flammable Liquids 2, H225; Carcinogenicity 1A, H350	>10-≤25%
121-33-5	VANILLIN Acute Toxicity - Oral 4, H302; Eye Irritation 2A, H319	>2.5-<10%
590-86-3	ISOVALERALDEHYDE Flammable Liquids 2, H225; Eye Irritation 2A, H319; Sensitization - Skin 1, H317; Specific Target Organ Toxicity - Single Exposure 3, H335	≥0.1-<1%
98-01-1	2-furaldehyde Acute Toxicity - Oral 3, H301; Acute Toxicity - Inhalation 3, H331; Carcinogenicity 2, H351; Acute Toxicity - Dermal 4, H312; Skin Irritation 2, H315; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H335; Flammable Liquids 4, H227	≥0.1-≤2.5%
98-00-0	FURFURYL ALCOHOL Acute Toxicity - Inhalation 3, H331; Carcinogenicity 2, H351; Specific Target Organ Toxicity - Repeated Exposure 2, H373; Acute Toxicity - Oral 4, H302; Acute Toxicity - Dermal 4, H312; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H335; Flammable Liquids 4, H227	≥0.1-≤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 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.

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.

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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:**		
57-55-6	PROPYLENE GLYCOL	30 mg/m³
64-17-5	ETHYL ALCOHOL	1,800 ppm
98-01-1	2-furaldehyde	2 ppm
98-00-0	FURFURYL ALCOHOL	15 ppm

· **PAC-2:**		
57-55-6	PROPYLENE GLYCOL	1,300 mg/m³
64-17-5	ETHYL ALCOHOL	3300* ppm
98-01-1	2-furaldehyde	10 ppm
98-00-0	FURFURYL ALCOHOL	42 ppm

· **PAC-3:**		
57-55-6	PROPYLENE GLYCOL	7,900 mg/m³
64-17-5	ETHYL ALCOHOL	15000* ppm
98-01-1	2-furaldehyde	100 ppm
98-00-0	FURFURYL ALCOHOL	250 ppm

7 Handling and storage

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

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· **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.

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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.

57-55-6 PROPYLENE GLYCOL	
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
121-33-5 VANILLIN	
WEEL	Long-term value: 10 mg/m³
98-01-1 2-furaldehyde	
PEL	Long-term value: 20 mg/m³, 5 ppm Skin
TLV	Long-term value: 0.2 ppm Skin; BEI, A3
98-00-0 FURFURYL ALCOHOL	
PEL	Long-term value: 200 mg/m³, 50 ppm
REL	Short-term value: 60 mg/m³, 15 ppm Long-term value: 40 mg/m³, 10 ppm Skin
TLV	Long-term value: 0.2 ppm Skin, A3

· **Ingredients with biological limit values:**	
98-01-1 2-furaldehyde	
BEI	200 mg/L Medium: urine Time: end of shift Parameter: Furoic acid with hydrolysis (nonspecific)

· **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.

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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:**

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

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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:**	*32.2 °C (90 °F)*
· **Flammability (solid, gaseous):**	*Flammable.*
· **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.*

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· **Explosion limits:**	
Lower:	2.6 Vol %
Upper:	15 Vol %
· **Vapor pressure at 20 °C (68 °F):**	59 hPa (44.3 mm Hg)
· **Density at 20 °C (68 °F):**	1.02295 g/cm³ (8.53652 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/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	41.5 %
Water:	28.5 %
VOC content:	41.48 % 424.3 g/l / 3.54 lb/gal
Solids content:	27.1 %
· **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.

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11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**		
57-55-6 PROPYLENE GLYCOL		
Dermal	LD50	20,800 mg/kg (rabbit)
64-17-5 ETHYL ALCOHOL		
Inhalative	LC50/4 h	20,000 mg/l (rat)
590-86-3 ISOVALERALDEHYDE		
Dermal	LD50	3,180 mg/kg (rabbit)

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98-00-0 FURFURYL ALCOHOL		
Dermal	LD50	400 mg/kg (rabbit)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** 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)**
Ethyl alcohol causes cancer when used in alcoholic beverages per IARC guidelines.

64-17-5	ETHYL ALCOHOL	1
98-01-1	2-furaldehyde	3
98-00-0	FURFURYL ALCOHOL	2B

· **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.

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14 Transport information

· **UN-Number**	
· **DOT, IMDG, IATA**	UN1197
· **UN proper shipping name**	
· **DOT**	Extracts, flavoring, liquid
· **IMDG, IATA**	EXTRACTS, FLAVOURING, LIQUID
· **Transport hazard class(es)**	
· **DOT**	
· **Class**	3 Flammable liquids
· **Label**	3
· **IMDG, IATA**	
· **Class**	3 Flammable liquids
· **Label**	3
· **Packing group**	
· **DOT, IMDG, IATA**	III
· **Environmental hazards:**	Not applicable.
· **Special precautions for user**	Warning: Flammable liquids
· **Hazard identification number (Kemler code):**	30
· **EMS Number:**	F-E,S-D
· **Stowage Category**	A
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
· **IMDG**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **UN "Model Regulation":**	UN 1197 EXTRACTS, FLAVOURING, LIQUID, 3, III

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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.

98-00-0	FURFURYL ALCOHOL

· **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
98-01-1	2-furaldehyde	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 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
ETHYL ALCOHOL
2-furaldehyde
FURFURYL ALCOHOL
ISOVALERALDEHYDE
· **Hazard statements**
Flammable liquid and vapor.
Causes serious eye irritation.
May cause an allergic skin reaction.

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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.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.
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 in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Wash contaminated clothing before reuse.
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.

· ***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

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TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Flammable Liquids 2: Flammable liquids – Category 2
Flammable Liquids 3: Flammable liquids – Category 3
Flammable Liquids 4: Flammable liquids – Category 4
Acute Toxicity - Oral 3: Acute toxicity – Category 3
Acute Toxicity - Oral 4: Acute toxicity – Category 4
Skin Irrititation 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
Carcinogenicity 2: Carcinogenicity – Category 2
Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3
Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2
· **** Data compared to the previous version altered.***