Safety Data Sheet
acc. to OSHA HCS

1 Identification

· **Product identifier**

· **Trade name:** **KEY LIME FLAVOR EXTRACT - TTB, NATURAL**

· **Other means of identification**

· **Article number:** AAHU

· **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:**
24/7/365 Response: Call ChemTel 1-800-255-3924

*

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

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
Lime oil
ORANGE OIL
· **Hazard statements**
Flammable liquid and vapor.
May cause an allergic skin reaction.

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Trade name: KEY LIME FLAVOR EXTRACT - TTB, NATURAL (AAHU)

(Contd. of page 1)

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, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground / bond container and receiving equipment.
Use explosion-proof [electrical/ventilating/lighting] equipment.
Use non-sparking tools.
Take action to prevent 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/hearing protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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.
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.

· ***Information pertaining to particular dangers for man and environment:***

· ***Classification system:***

· ***NFPA ratings (scale 0 - 4)***



Health = 0
Fire = 3
Reactivity = 0

· ***HMIS-ratings (scale 0 - 4)***



*Health = *1*
Fire = 3
Reactivity = 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.*

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Trade name: KEY LIME FLAVOR EXTRACT - TTB, NATURAL (AAHU)

(Contd. of page 2)

· **Dangerous components:**

57-55-6	Propylene glycol Acute toxicity - oral 4, H302	>25-≤50%
64-17-5	ETHYL ALCOHOL Flammable liquids 2, H225; Carcinogenicity 1A, H350	>25-≤50%
8008-26-2	Lime oil Flammable liquids 3, H226; Aspiration hazard 1, H304; Skin irritation 2, H315; Sensitization - skin 1, H317	≥1-≤2.5%
8008-57-9	ORANGE OIL Flammable liquids 3, H226; Aspiration hazard 1, H304; Skin irritation 2, H315; Sensitization - skin 1, H317	≥0.1-<1%

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.
· **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:**
CO_2, 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 section 13.
Ensure adequate ventilation.
· **Protective Action Criteria for Chemicals**

· **PAC-1:**

57-55-6	Propylene glycol	30 mg/m³

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Trade name: KEY LIME FLAVOR EXTRACT - TTB, NATURAL (AAHU)

(Contd. of page 3)

64-17-5	ETHYL ALCOHOL	1,800 ppm

· **PAC-2:**

57-55-6	Propylene glycol	1,300 mg/m³
64-17-5	ETHYL ALCOHOL	3300* ppm

· **PAC-3:**

57-55-6	Propylene glycol	7,900 mg/m³
64-17-5	ETHYL ALCOHOL	15000* ppm

· **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 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.
· **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 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: 1880 mg/m³, 1000 ppm A3

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

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

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Trade name: KEY LIME FLAVOR EXTRACT - TTB, NATURAL (AAHU)

(Contd. of page 4)

· **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 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 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:**	Undetermined.
· **Flammability:**	Flammable.
· **Explosion limits:**	
· **Lower:**	2.6 Vol %
· **Upper:**	15 Vol %
· **Flash point:**	31.7 °C (89.1 °F)
· **Decomposition temperature:**	Not determined.
· **pH-value:**	Not determined.
· **Viscosity:**	
· **Kinematic:**	Not determined.
· **Dynamic:**	Not determined.

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Trade name: KEY LIME FLAVOR EXTRACT - TTB, NATURAL (AAHU)

(Contd. of page 5)

· **Solubility in / Miscibility with**	
· **Water:**	Fully miscible.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Vapor pressure at 20 °C (68 °F):**	59 hPa (44.3 mm Hg)
· **Vapor pressure:**	
· **Density at 20 °C (68 °F):**	0.96688 g/cm³ (8.06861 lbs/gal)
· **Relative density**	Not determined.
· **Vapor density**	Not determined.
· **Particle characteristics**	Not applicable.
· **Other information**	
· **Appearance:**	
· **Form:**	Fluid
· **Important information on protection of health and environment, and on safety.**	
· **Ignition temperature:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Solvent content:**	
· **Organic solvents:**	77.5 %
· **Water:**	19.9 %
· **VOC content:**	77.48 % 749.1 g/l / 6.25 lb/gal
· **Solids content:**	0.1 %
· **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	4,215 mg/kg (rat)

57-55-6 Propylene glycol		
Oral	LD50	2,000 mg/kg (rat)
Dermal	LD50	20,800 mg/kg (rabbit)
64-17-5 ETHYL ALCOHOL		
Oral	LD50	7,060 mg/kg (rat)

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

Trade name: KEY LIME FLAVOR EXTRACT - TTB, NATURAL (AAHU)

(Contd. of page 6)

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

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Trade name: KEY LIME FLAVOR EXTRACT - TTB, NATURAL (AAHU)

*

14 Transport information

· **UN-Number**	
· **DOT, IMDG, IATA**	UN1197
· **UN proper shipping name**	
· **DOT, IATA**	Extracts, liquid
· **IMDG**	EXTRACTS, 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.
· **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
· **Special precautions for user**	Warning: Flammable liquids
· **Hazard identification number (Kemler code):**	30
· **EMS Number:**	F-E,S-D
· **Stowage Category**	A
· **UN "Model Regulation":**	UN 1197 EXTRACTS, LIQUID, 3, III

US

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

Trade name: KEY LIME FLAVOR EXTRACT - TTB, NATURAL (AAHU)

*

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:**
None of the ingredients is listed.

· **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.

· **Department issuing SDS:** Regulatory Department
· **Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods

(Contd. on page 10)

Safety Data Sheet
acc. to OSHA HCS

Trade name: KEY LIME FLAVOR EXTRACT - TTB, NATURAL (AAHU)

(Contd. of page 9)

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
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.***