



Material Safety Data Sheet

Product Name: LEMONEO

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product ID: ELIQ-LMONEO0-2019
Synonyms: E-liquid, E-Juice, Essence
CAS#: Mixture
RTEC: Not Available
CI#: Not Available

Contact Information: VAPORETTO ENTERPRISES

SECTION 2: COMPOSITION INFORMATION

Description

This mixture contains USP Grade Propylene Glycol and USP Grade Glycerin. Mixture is prepared under GMP conditions.

INGREDIENT	CHEMICAL NAME	FORMULA	CAS#	AMOUNT
Propylene Glycol, USP	1,2-propanediol	C ₃ H ₈ O ₂	57-55-6	< 50% by weight
Glycerin, USP	1,2,3-propanetriol	C ₃ H ₈ O ₃	56-81-5	< 50% by weight
Proprietary Flavor Blend	N/A	N/A	N/A	< 15% by weight

SECTION 3: HAZARDS COMPOSITION

Eye Contact: May cause eye irritation.

Skin Contact: May be toxic in contact with skin. May cause skin irritation.

Inhalation: May be irritating to mucous membranes and upper respiratory tract.

Ingestion: May cause nausea, abdominal pain, or sweating. May be toxic or fatal if swallowed.

SECTION 4: FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an antibacterial cream. Seek immediate medical attention.

Serious Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

SECTION 5: FIRE AND EXPLOSION DATA

GENERAL INFORMATION

Propylene Glycol, USP

Flammability: May be combustible at high temperature.
Auto-Ignition Temp.: 371 °C
Flash Points: Closed Cup: 99 °C / Open Cup: 107 °C
Flammable Limits : Lower: 2.6% / Upper: 12.5%
Products of Combustion: Carbon Oxides (CO, CO2)
Explosive Hazards: Not Available
Fire Hazards: Slightly flammable to flammable in presence of heat.

Glycerin, USP

Flammability: May be combustible at high temperature.
Auto-Ignition Temp.: 370 °C
Flash Points: Closed Cup: 160 °C / Open Cup: 199 °C
Flammable Limits : Lower: 0.9%
Products of Combustion: Carbon Oxides (CO, CO2)
Explosive Hazards: Not Available
Fire Hazards: Slightly flammable to flammable in in presence of heat, open flames, and sparks. Explosive in presence of oxidizing materials.

Suitable Extinguishing Media: Use water spray, carbon dioxide, dry chemical powder or foam.

Unsuitable Extinguishing Media: Do not use extinguishing media containing oxidizing agents.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Small Spill: Dilute with water and mop up, or absorb with an inert dry material and place in and appropriate waste disposal container.

Large Spill: Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.

SECTION 7: HANDLING AND STORAGE

Handling Precautions

<i>Safe Handling:</i>	Do not allow getting into eyes, on skin and on clothing. Avoid prolonged or repeated exposure.
<i>Environment:</i>	Avoid runoff into storm sewers and ditches which lead to waterways.
<i>Incompatibility:</i>	Keep away from oxidizing agents and strong acids.

Storage Precautions

<i>Temperature:</i>	Store between 50°F - 70°F. Keep away from high heat.
<i>Sunlight:</i>	Store protected from sunlight and artificial light.
<i>Humidity:</i>	Store in a cool dry place protected from moisture.
<i>Ventilation:</i>	Provide adequate ventilation. Keep away from fumes.
<i>Packaging:</i>	Store in tightly closed containers. Do not reuse containers.

Risk Management

<i>Corrosive Conditions:</i>	Non corrosive in presence of glass.
<i>Flammability Hazards:</i>	Emits toxic fumes under fire conditions.
<i>Evaporative Conditions:</i>	Keep surrounding cool and well ventilated.
<i>Ignition Sources:</i>	Keep away from potential sources of ignition.

Specific Use Refill liquid for use in electronic cigarettes.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls:	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection:	Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection:	Splash goggles, full suit, vapor respirator, boots and gloves. A self

(Large Spills)

contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

EXPOSURE LIMITS:

Propylene Glycol, USP	<i>United States (AIHA) 10 mg/m³</i>
Glycerin, USP	<i>United States (OSHA) 15 mg/m³</i>

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
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Physical State:	Liquid	Vapor Pressure:	Not Available
Color:	Clear to Dark Yellow	Density:	1,125 g/cm ³
Odor:	Sweet	Rel. Density:	Not Available
pH-value:	Not available	Vapor Density:	>1 vs aih
Boiling point:	250°C	Evaporation Rate:	Not Available
Freezing Point:	-65° C	Water Solubility:	50 mg/ml
Viscosity:	600 mPas		

(Dynamic at 20°C)

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable	Polymerization:	Will Not Occur
Reactivity:	Reactive with oxidizing agents, reducing agents, acids, alkalis.		
Instability Conditions:	Avoid contact with incompatible materials, excess heat and ignition sources.		

SECTION 11: TOXICOLOGY INFORMATION

Propylene Glycol, USP

<i>Oral, Rat:</i>	LD50 = 20,000 mg/kg
<i>Oral, Mouse:</i>	LD50 = 22,000 mg/kg
<i>Dermal, Rabbit:</i>	LD50 = 20,800 mg/kg

Glycerin, USP

<i>Oral, Rat:</i>	LD50 = 12,600 mg/kg
<i>Oral, Mouse</i>	LD50 = 4,090 mg/kg
<i>+Dermal, Rabbit:</i>	LD50 = 10,000 mg/kg
<i>Mist, Rat</i>	LC50 = 570 mg/m ³ / 1 hour (Based on 4-hour exposure)

SECTION 12: ECOLOGICAL INFORMATION

Propylene Glycol, USP

<i>Toxicity:</i>	Fish (Oncorhynchus mykiss)	96 h: LC50 = 40,613 mg/l
Water	Flea (Ceriodaphnia Dubia)	48 h: LC50 = 18,340 mg/l
<i>Degradability:</i>	Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Biodegradation may occur under anaerobic conditions (in the absence of oxygen).	
<i>Accumulation:</i>	Bioconcentration potential is low (BCF < 100 or Log Pow < 3) Log Pow used: -1.07 EU Method A.8 (Partition Coefficient) bioconcentration Factor (BCF): 0.09; Estimated.	
<i>Mobility in Soil:</i>	Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process., Potential for mobility in soil is very high (Koc between 0 and 50). Koc: < 1 (estimated) Henry's Law Constant (H): 1.2E-08 atm*m3/mole Measured	

Glycerin, USP

<i>Toxicity:</i>	No aquatic environmental information is available on this product.	
<i>Degradability:</i>	This product is completely biodegradable.	
<i>Accumulation:</i>	Bioaccumulation of this product has not been determined.	
<i>Mobility in Soil:</i>	Mobility of this material has not been determined. Low potential for absorption to soil. Glycerine will partition primarily to water.	

SECTION 13: DISPOSAL CONSIDERATIONS

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER.

All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. For unused and uncontaminated product, the preferred options include sending to a licensed, permitted: Recycler. Reclaimer. Incinerator or other thermal destruction device.

Sewage Disposal: Avoid release to environment. Do not wash away into sewer.

Chemical Properties: Substance is hygroscopic and should not be allowed to come in contact with moisture/water.

SECTION 14: TRANSPORT INFORMATION

Based on the LD50 (oral and dermal) should be calculated based on the testing of animals in the absence of adequate data on human toxicity.

The LD50 (oral and dermal) of a mixture is determined by the following formula:

$$\frac{C_A}{T_A} + \frac{C_B}{T_B} + \frac{C_Z}{T_Z} = \frac{100}{T_M}$$

C = the % concentration of constituent A, B ... Z in the mixture;
 T = the oral LD50 values of constituent A, B ... Z;
 T_M = Oral/Dermal LD50 value of the mixture.

Based on the formula above, the LD50 of the Total Mixture (T_M) is for this product is calculated as:

Oral Toxicity

50.99%	+	49.01%	+	15%	=	100%
50000		50000		15000		T _M
Propylene Glycol		Glycerin		Flavoring		Mixture

Oral LD50 of Mixture (T_M) = 5939 mg/kg

Dermal Toxicity

50.99%	+	49.01%	+	15%	=	100%
50000		50000		15500		T _M
Propylene Glycol		Glycerin		Flavoring		Mixture

Dermal LD50 of Mixture (T_M) = 9622 mg/kg

Under FR Title 49, this mixture is not presumed to be toxic to humans based on the following:

- Oral LD50 of Mixture 5939 mg/kg > 300 mg/kg*
- Dermal LD50 of Mixture 9622 mg/kg > 1000 mg/kg*

E Liquid is exempt from dangerous goods. It is considered non-dangerous by the International Civil Aviation Organization (ICAO), the International Air Transport Association (IATA), or the International Maritime Goods Regulation (IMDG)

Transport fashion: By air, by sea

SECTION 15: REGULATORY INFORMATION

- Clean Air Act:** Does not contain any hazardous air pollutants.
Does not contain any Class 1 Ozone depletors.
Does not contain any Class 2 Ozone depletors.
- Clean Water Act:** None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
- OSHA:** Not considered highly hazardous by OSHA.

SECTION 16: OTHER INFORMATION

Acronyms:

- EC:* European Commission
CLP: Classification Labelling and Packaging
GHS: Globally harmonized system on classification and labelling
DSD: Dangerous Substance directive
EWC: European Waste Catalogue
AVV: Waste codes according to the waste catalogue ordinance
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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