

## Section 1: Identification

<b>Common Name/Trade Name</b>	Liver Flavor	
<b>Supplier Information</b>	Letco Medical, LLC 1316 Commerce Drive NW Decatur, AL 35601 1 (800) 239-5288 +1 (734) 843-4693	<b>IN CASE OF EMERGENCY:</b> Chemtrec 1 (800) 424-9300 (24 hours)
<b>Product Synonym(s)</b>	N/A	
<b>Relevant Use(s) of Product</b>	Flavoring	

## Section 2: Hazards Identification

<b>Classification of Substance or Mixture</b>	Eye Dam. 1, Skin Irrit. 2	
<b>Signal Word</b>	Danger	
<b>Hazard Statement(s)</b>	H315 H318	Causes skin irritation Causes serious eye damage
<b>Pictogram(s)</b>		
<b>Precautionary Statement(s)</b>	P280 P302+P352 P305+P338+P351 P310 P362	Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN Wash with soap and water. IF IN EYES Remove contact lenses if present and easy to do. continue rinsing. Rinse cautiously with water for several minutes. Immediately call a POISON CENTER or doctor/physician. Take off contaminated clothing and wash before reuse.
<b>Hazards Not Otherwise Classified</b>	No data available	
<b>Ingredient(s) with Unknown Toxicity</b>	No data available	

## Section 3: Composition/Information on Ingredients

<b>Chemical Name</b>	N/A		
<b>Common Name</b>	Liver Flavor		
<b>CAS Number</b>	N/A		
	<b>Material</b>	<b>Percent</b>	<b>CAS</b>
	L(+)-Lactic acid	10-25%	79-33-4
	4-Thiapentanal	0.1-1.0%	3268-49-3
	Butyric acid	<0.1%	107-92-6
	Acetic acid	<0.1%	64-19-7
	2-Furancarboxaldehyde (Furfural)	<0.1%	98-01-1
	2,3-Pentanedione	<0.1%	600-14-6
	Acetyl methyl carbinol	<0.1%	513-86-0
	Dimethyl sulfide	<0.1%	75-18-3
<b>Impurities and/or Stabilizing Additives</b>	No data available		

## Section 4: First Aid Measures

<b>General Advice</b>	No data available
<b>If Inhaled</b>	Remove to fresh air and seek medical assistance if necessary.
<b>In Case of Skin Contact</b>	Remove contaminated clothing and shoes. Wash with mild soap and water. Seek medical attention if necessary.
<b>In Case of Eye Contact</b>	Remove contact lenses. Flush eyes with cool water for at least 15 minutes. If irritation persists, seek medical attention.
<b>If Swallowed</b>	Rinse mouth. Do not induce vomiting. Drink water. Consult a physician.
<b>Most Important Symptoms and Effects</b>	No data available

## Section 5: Fire Fighting Measures

<b>Suitable Extinguishing Media</b>	SUITABLE EXTINGUISHING MEDIA: Water spray/mist, Foam, Carbon Dioxide (CO <sub>2</sub> ), and Dry Chemical. Water may be used to cool off containers. UNSUITABLE EXTINGUISHING MEDIA: Do not use a solid water stream as it may scatter and spread fire.
<b>Special Hazards Arising From the Substance/Mixture</b>	None known.
<b>Special PPE and/or Precautions for Firefighters</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## Section 6: Accidental Release Measures

<b>Personal Precautions, Protective Equipment and Emergency Procedures</b>	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.
<b>Methods and Materials Used for Containment</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
<b>Cleanup Procedures</b>	Contain material. Collect using solid absorbent material and place into appropriate waste container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

## Section 7: Handling and Storage

<b>Precautions for Safe Handling</b>	Use with adequate ventilation. Keep away from heat and flame.
<b>Conditions for Safe Storage</b>	Keep containers tightly closed in a dry, cool and well-ventilated place.

## Section 8: Exposure Controls/Personal Protection

<b>Components with Workplace Control Parameters</b>	No data available
<b>Appropriate Engineering Controls</b>	Always observe good personal hygiene measures, such as washing your hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
<b>PPE - Eye/Face Protection</b>	Wear safety glasses with side shields or goggles.
<b>PPE - Skin Protection</b>	Chemical resistant gloves recommended.
<b>PPE - Body Protection</b>	Chemical resistant gloves recommended.
<b>PPE - Respiratory Protection</b>	Proper ventilation, engineering controls, such as local exhaust ventilation, and if necessary, a NIOSH certified respirator with appropriate cartridges is highly recommended.

## Section 9: Physical and Chemical Properties

<b>Appearance</b>	An opaque to cloudy liquid
<b>Upper/Lower Flammability or Explosive Limits</b>	No data available
<b>Odor</b>	LIVER
<b>Vapor Pressure</b>	No data available
<b>Odor Threshold</b>	Not Established
<b>Vapor Density</b>	Not Measured
<b>pH</b>	Not Measured
<b>Relative Density</b>	No data available
<b>Melting Point/Freezing Point</b>	No data available
<b>Solubility</b>	Soluble in water
<b>Initial Boiling Point and Boiling Range</b>	Initial Boiling Point, °C: 33
<b>Flash Point</b>	°C / °F (Closed Cup): >93 / >200
<b>Evaporation Rate</b>	Not Measured
<b>Flammability (Solid, Gas)</b>	No data available
<b>Partition Coefficient</b>	Not Measured
<b>Auto-Ignition Temperature</b>	Not Measured
<b>Decomposition Temperature</b>	Not Measured
<b>Viscosity</b>	Not Measured

## Section 10: Stability and Reactivity

<b>Reactivity</b>	The product is non-reactive under normal conditions of use, storage, and transport
<b>Chemical Stability</b>	Material is stable under normal conditions
<b>Possibility of Hazardous Reactions</b>	No dangerous reactions known under conditions of normal use.
<b>Conditions to Avoid</b>	Heat, flames and sparks. Extremes of temperature and direct sunlight.
<b>Incompatible Materials</b>	Keep away from strong oxidizing agents, heat and open flames.
<b>Hazardous Decomposition Products</b>	When heated , may produce unpleasant fumes and/or smoke. Combustion may produce Carbon Monoxide and/or Carbon Dioxide.

## Section 11: Toxicological Information

<b>Acute Toxicity - LD50 Oral</b>	The acute effects of this product have not been tested. Data on individual components are tabulated below 79-33-4 L(+)-Lactic acid Oral LD50: 3730 mg/kg Rat. 3268-49-3 4-Thiapentanal 490 mg/kg Rat 64-19-7 Acetic acid 3310 mg/kg Rat 98-01-1 2-Furancarboxaldehyde (Furfural) 125 mg/kg Rat 75-18-3 Dimethyl sulfide 535 mg/kg Rat
<b>Acute Toxicity - Inhalation</b>	The acute effects of this product have not been tested. Data on individual components are tabulated below 79-33-4 L(+)-Lactic acid: No information. 3268-49-3 4-Thiapentanal: 4.5 mg/L Rat. 64-19-7 Acetic acid: 11.4 mg/L Rat. 98-01-1 2-Furancarboxaldehyde (Furfural): No information. 75-18-3 Dimethyl sulfide: No information
<b>Acute Toxicity - Dermal</b>	The acute effects of this product have not been tested. Data on individual components are tabulated below 79-33-4 L(+)-Lactic acid >2000 mg/kg Rabbit. 3268-49-3 4-Thiapentanal: 1650 mg/kg Rabbit. 64-19-7 Acetic acid: 1060 mg/kg Rabbit. 98-01-1 2-Furancarboxaldehyde (Furfural): 500 - 1000 mg/kg Rabbit. 75-18-3 Dimethyl sulfide: >5000 mg/kg Rabbit
<b>Acute Toxicity - Eye</b>	The acute effects of this product have not been tested.
<b>Skin Corrosion/Irritation</b>	Not expected to cause skin problems under normal use conditions.
<b>Serious Eye Damage/Irritation</b>	Not expected to cause eye problems under normal use conditions.
<b>Respiratory or Skin Sensitization</b>	No adverse effects due to inhalation are expected under normal use.
<b>Germ Cell Mutagenicity</b>	No data available
<b>Carcinogenicity IARC</b>	This product does not contain any carcinogenic substances as classified by IARC, NTP, ACGIH or OSHA.
<b>Carcinogenicity ACGIH</b>	This product does not contain any carcinogenic substances as classified by IARC, NTP, ACGIH or OSHA.
<b>Carcinogenicity NTP</b>	This product does not contain any carcinogenic substances as classified by IARC, NTP, ACGIH or OSHA.
<b>Carcinogenicity OSHA</b>	This product does not contain any carcinogenic substances as classified by IARC, NTP, ACGIH or OSHA.
<b>Reproductive Toxicity</b>	No data available
<b>Specific Target Organ Toxicity - Single Exposure</b>	No data available
<b>Specific Target Organ Toxicity - Repeated Exposure</b>	No data available
<b>Aspiration Hazard</b>	No data available

## Section 12: Ecological Information

<b>Toxicity</b>	Normal recommended use releases little of the product to the environment. Responsible manufacturing applications should include provisions for spill containment and measures to control loss of volatiles.
<b>Persistence and Degradability</b>	No data available
<b>Bio-accumulative Potential</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Other Adverse Effects</b>	No data available

## Section 13: Disposal Considerations

<b>Waste Treatment Methods Product</b>	Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with material or used container. Dispose of material in accordance with applicable federal, state and local regulations
<b>Waste Treatment Methods Packaging</b>	Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with material or used container. Dispose of material in accordance with applicable federal, state and local regulations
<b>Special Precautions Landfill or Incinerations</b>	No data available
<b>Other Information</b>	No data available

## Section 14: Transport Information

<b>UN Number</b>	Not dangerous goods
<b>UN Proper Shipping Name</b>	N/A
<b>Transport Hazard Class(es)</b>	N/A
<b>Packaging Group</b>	N/A
<b>Environmental Hazards</b>	No data available

## Section 15: Regulatory Information

SARA SECTION 313: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372: Chemical Name CAS-No. Methyleugenol 93-15-2

## Section 16: Other Information

<b>Additional Information</b>	
<b>Prepared By</b>	Lisa Russell
<b>Revision Date</b>	01/07/2019 12:31

### Disclaimer

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