


Section 1: Identification

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

Section 2: Hazards Identification

Classification of Substance or Mixture	Eye Dam. 1, Skin Irrit. 2	
Signal Word	Danger	
Hazard Statement(s)	H315 H318	Causes skin irritation Causes serious eye damage
Pictogram(s)		
Precautionary Statement(s)	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.
Hazards Not Otherwise Classified	No data available	
Ingredient(s) with Unknown Toxicity	No data available	

Section 3: Composition/Information on Ingredients

Chemical Name	N/A		
Common Name	Liver Flavor		
CAS Number	N/A		
Material		Percent	CAS
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
Impurities and/or Stabilizing Additives	No data available		

Section 4: First Aid Measures

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

Section 5: Fire Fighting Measures

Suitable Extinguishing Media	SUITABLE EXTINGUISHING MEDIA: Water spray/mist, Foam, Carbon Dioxide (CO ₂), 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.
Special Hazards Arising From the Substance/Mixture	None known.
Special PPE and/or Precautions for Firefighters	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures	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.
Methods and Materials Used for Containment	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Cleanup Procedures	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

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

Section 8: Exposure Controls/Personal Protection

Components with Workplace Control Parameters	No data available
Appropriate Engineering Controls	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.
PPE - Eye/Face Protection	Wear safety glasses with side shields or goggles.
PPE - Skin Protection	Chemical resistant gloves recommended.
PPE - Body Protection	Chemical resistant gloves recommended.
PPE - Respiratory Protection	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

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

Section 10: Stability and Reactivity

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

Section 11: Toxicological Information

Acute Toxicity - LD50 Oral	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
Acute Toxicity - Inhalation	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
Acute Toxicity - Dermal	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
Acute Toxicity - Eye	The acute effects of this product have not been tested.
Skin Corrosion/Irritation	Not expected to cause skin problems under normal use conditions.
Serious Eye Damage/Irritation	Not expected to cause eye problems under normal use conditions.
Respiratory or Skin Sensitization	No adverse effects due to inhalation are expected under normal use.
Germ Cell Mutagenicity	No data available
Carcinogenicity IARC	This product does not contain any carcinogenic substances as classified by IARC, NTP, ACGIH or OSHA.
Carcinogenicity ACGIH	This product does not contain any carcinogenic substances as classified by IARC, NTP, ACGIH or OSHA.
Carcinogenicity NTP	This product does not contain any carcinogenic substances as classified by IARC, NTP, ACGIH or OSHA.
Carcinogenicity OSHA	This product does not contain any carcinogenic substances as classified by IARC, NTP, ACGIH or OSHA.
Reproductive Toxicity	No data available
Specific Target Organ Toxicity - Single Exposure	No data available
Specific Target Organ Toxicity - Repeated Exposure	No data available
Aspiration Hazard	No data available

Section 12: Ecological Information

Toxicity	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.
Persistence and Degradability	No data available
Bio-accumulative Potential	No data available
Mobility in Soil	No data available
Other Adverse Effects	No data available

Section 13: Disposal Considerations

Waste Treatment Methods Product	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
Waste Treatment Methods Packaging	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
Special Precautions Landfill or Incinerations	No data available
Other Information	No data available

Section 14: Transport Information

UN Number	Not dangerous goods
UN Proper Shipping Name	N/A
Transport Hazard Class(es)	N/A
Packaging Group	N/A
Environmental Hazards	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

Additional Information	
Prepared By	Lisa Russell
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