

HEALTH	2
FLAMMABILITY	1
REACTIVITY	0

Section 1: IDENTIFICATION

Product Name: **Gamma Hexalactone, Natural**
 Product Number: **0255600**
 CAS-No.: 695-06-7


Recommended Use: Flavorings

Manufacturer: Aurochemicals
 7 Nicoll Street
 Washingtonville, NY 10992 – USA
 845-496-6065
 845-496-6248 Fax

Emergency Telephone No.: 1-800-535-5053
 (International 1-352-323-3500 collect)

Section 2: HAZARD(s) IDENTIFICATION

OSHA Hazards Irritant
 GHS Classification Skin irritation (Category 3)
 Eye irritation (Category 2A)

GHS Label elements, including precautionary statements
 Pictogram 

Signal Word: **WARNING**

Hazard Statement: H316 Causes mild skin irritation
 H319 Causes serious eye irritation

Precautionary Statement P305+ IF IN EYES: Rinse cautiously with water for several minutes
 P351+ Remove contact lenses if present and easy to do
 P338 Continue rinsing

HMIS Classification Health Hazard 2
 Flammability 1
 Physical Hazards 0

Potential Health Effects
 Inhalation May be harmful if inhaled. Causes respiratory tract irritation
 Skin May be harmful if absorbed through skin. Causes skin irritation
 Eyes Causes eye irritation
 Ingestion May be harmful if swallowed

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Synonyms	Gamma-Caprolactone Gamma-Ethyl-γ-butyrolactone Hexan-4-olide 4-Hydroxyhexanoic acid, gamma-lactone
Molecular Formula	C ₇ H ₁₂ O ₃
Molecular Weight	144.17 g/mol

Component	Concentration
Common Name:	Gamma Hexalactone

Section 4: FIRST AID MEASURES

General Advise:	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
Contact with eyes:	Rinse thoroughly with plenty of water for at least 15 minutes and seek medical advice.
Contact with skin:	Remove contaminated clothing. Rinse skin with cool water then wash with plenty of mild soap and warm water. Consult a physician
Inhalation:	Provide fresh air, Consult a physician
Ingestion:	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water, seek medical advice, show this container or label to attending physician
Clothing contamination:	Wash contaminated clothing before re-use

Section 5: FIREFIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
Special protective equipment for firefighters	Wear self contained breathing apparatus for firefighting if necessary
Other Information	Hazardous decomposition products formed under fire conditions – Carbon oxides.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas
Environmental-protected measures	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Procedures for cleaning / absorption	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal
Ventilate area	After sweep up, wash area and ventilate area well

Section 7: HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Normal measure for
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preventive fire protection. Use in well ventilated work area. Do not eat or drink while handling this product.

Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place under inert gas.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits: Contains no substances with occupational exposure limit values

Personal Protective Equipment: **These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. They should not be construed as offering an approval for any specific use scenario.**

Complete suit protecting against chemicals should be selected specifically for the work place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier

Engineering Controls: Ventilation: Local exhaust preferred. General ventilation (exhaust hoods) are required. Safety showers and eyewash stations.

Respiratory Protection: Where risk assessment shows respirators are appropriate the respirator should be selected specifically for the work place, depending on concentration and quantity of the hazardous substances handled. Use respirators and components tested and approved under appropriate government standards such as NIOSH.

Eye Protection: Wear appropriate face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Hand Protection: Wear chemically resistant Nitrile rubber gloves and wash and dry hands after handling this product.

Industrial Hygiene: Avoid contact with skin, eyes, and clothing. Handle in accordance with good industrial hygiene and safety practice. Wash contaminated clothing before reuse. Wash hands after working with product

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Color:	Colorless to pale yellow
Odor:	Sweet, Herbaceous, warm, powerful
Boiling Point:	220°C
Flashpoint:	104°C
Melting Point	122°C
Ignition temperature	No data available
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
Vapor Pressure:	0.6 mmHg @ 25°C FMA
Specific Gravity @ 25°C:	1.0200: 1.0250
Solubility	1:1 in 95% alcohol

Section 10: STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions
Possibility of Hazardous reactions	No data available
Conditions to avoid	Presents no special reactivity hazard
Materials to avoid	Strong oxidizing agents, strong bases, strong acids
Hazardous decomposition products	CO, CO ₂ , Water, Carbon Oxides

Section 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	Most likely routes of entry is through the skin. Full strength may be irritating to the skin and eyes
LD50, Oral Rat-	>5,000 mg/kg
LC50 Inhalation	No data available
LD50 Dermal - Rabbit	>5,000 mg/kg
Further toxicological information	No data available
Skin corrosion / irritation	Rabbit – Mild skin irritation -24h
Serious eye damage / eye irritation	Irritating to eyes
Respiratory or skin sensitization	Buehler test – guinea pig – does not cause skin sensitisation
Germ cell mutagenicity	Genotoxicity in vitro – Hamster- ovary; cytogenetic analysis
Carcinogenicity	
	IARC No component of this product, present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
	ACGIH No component of this product, present at levels greater than or equal to 0.1% is identified as a carcinogen by ACGIH.
	NTP No component of this product, present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
	OSHA No component of this product, present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity	Mouse – Oral: Maternal effects: other effects. Specific Developmental Abnormalities, Musculoskeletal system
Specific target organ toxicity-Single Exposure (GHS)	No data available

Safety Data Sheet

Specific target organ toxicity-Repeated Exposure (GHS)	No data available
Aspiration hazard	No data available
Potential health effects	Inhalation May be harmful if inhaled. Causes respiratory tract irritation Ingestion May be harmful if swallowed Skin May be harmful if absorbed through skin. Causes skin irritation Eyes Causes eye irritation
Signs and Symptoms of Exposure	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated
Synergistic effects	No data available
RTECS	LU4220000

Section 12: ECOLOGICAL INFORMATION

Toxicity	
Persistence and degradability: Biodegradability	No data available
Other adverse effects	No data available

Section 13: DISPOSAL CONSIDERATIONS

Product:	According to local regulations
Packaging:	According to local regulations

Section 14: TRANSPORT INFORMATION

DOT (US)	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

Section 15: REGULATORY INFORMATION

OSHA Hazards	Irritant
SARA 302	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA 313 Components	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313
SARA 311/312 Hazards	Acute Health Hazard
Massachusetts Right to Know Components	No components are subject to the Massachusetts Right to Know Act
Pennsylvania Right to Know Components	Hexan-4-olide CAS # 695-06-7 Rev. Date:
New Jersey Right to Know Components	Hexan-4-olide CAS # 695-06-7 Rev. Date:
California Prop. 65 Components	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm

Section 16: OTHER INFORMATION

Aurochemicals provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Aurochemicals makes no representations or warranties, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Aurochemicals will not be responsible, nor held liable, for damages resulting from use of or reliance upon this information.

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