

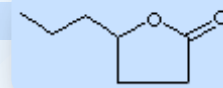
gamma-HEPTALACTONE

SYNONYMS

1,4-Heptanolide; Dihydro-5-propyl-2(3H)-furanone; 4-Hydroxyheptanoic acid lactone; 4-Propyl-4-hydroxybutanoic acid lactone; Dihydro-5-propyl-2(3H)-furanone; gamma-Heptanolactone; gamma-Propiobutyrolactone; gamma-Propyl-gamma-butyrolactone; Heptan-4-olide; 4-Hydroxyheptanoic acid gamma-lactone; FEMA No. 2539;

PRODUCT IDENTIFICATION

CAS RN	105-21-5; 1336-71-6; 57129-71-2;
EINECS RN	203-279-9
FORMULA	C ₇ H ₁₂ O ₂
MOLE WEIGHT	128.17



PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Clear oily liquid
MELTING POINT	
BOILING POINT	61 – 62 C at 2 mmHg
DENSITY	0.99 – 1.01
SOLUBILITY IN WATER	
pH	
VAPOR DENSITY	
REFRACTIVE INDEX	1.4390 - 1.4440
FLASH POINT	108 C

STABILITY AND REACTIVITY

STABILITY	Stable under normal conditions.
INCOMPATIBLE MATERIALS	Strong oxidizing agents, oxidizing agents, acids, alkaline hydroxides.
DECOMPOSITION PRODUCTS	Carbon oxides
POLYMERIZATION	Has not been reported
NFPA RATINGS	Health: 2; Flammability: 1; Instability: 0

SAFETY

HAZARD NOTES	Avoid contact and inhalation.
EYE	Causes eye irritation
SKIN	Causes skin irritation.
INGESTION	May cause irritation of the digestive tract.
INHALATION	May cause respiratory tract irritation.
CHRONIC	Chronic exposure may cause effects similar to those of acute exposure.

TRANSPORT & REGULATORY INFORMATION

UN NO.	
HAZARD CLASS	
PACKING GROUP	
HAZARD SYMBOL	XI
RISK PHRASES	36/38
SAFETY PHRASES	26-37/39

OTHER INFORMATION



gamma-HEPTALACTONE

Lactone is an internal cyclic monoester (anhydride) derived from the hydroxyl and carboxyl radicals of gamma or delta hydroxy acids by the removal of a H₂O between a carboxyl and a hydroxyl group in the same molecule; gamma-hydroxybutyric acid forms gamma-butyrolactone and delta-hydroxydecanoic acid forms delta-decalactone spontaneously. In result, prefixes describe the ring size: beta- is for 4-membered ring), gamma- , 5-membered, and delta-, 6-membered ring. Lactone moiety is important in the field of perfumery, vitamins, and and the antibiotics. Lactone undergoes the reactions of hydrolysis, reduction, aminolysis, michael reaction.

SALES SPECIFICATION

APPEARANCE	Clear oily liquid
ASSAY	99.0% min
SPECIFIC GRAVITY	0.99 – 1.01
REFRACTIVE INDEX	1.4390 - 1.4440
ACID VALUE	1.0 max (mg KOH/G)

PACKING

PRICE

