

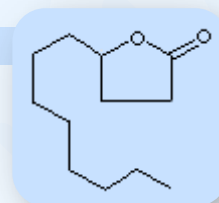
gamma-DODECALACTONE

SYNONYMS

4-Decanolide; 4-Dodecanolide; 4-Hydroxy-4-octylbutanoic acid lactone; 4-Hydroxydodecanoic acid lactone; Dihydro-5-octyl-2(3H)-furanone; Dodecanolide-1,4; gamma-Dodecanolactone; gamma-Octyl-gamma-butyrolactone; gamma-n-Octyl-gamma-N-butyrolactone; Dihydro-5-octylfuran-2(3H)-one; gamma-n-Octyl-gamma-n-butyrolactone; FEMA No. 2400; FL No.: 10.019;

PRODUCT IDENTIFICATION

CAS RN	2305-05-7; 57084-18-1
EINECS RN	218-971-6
FORMULA	C ₁₂ H ₂₂ O ₂
MOLE WEIGHT	198.30



PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Clear oily liquid
MELTING POINT	17 – 18 C
BOILING POINT	130 – 132 C at 1.50 mmHg
DENSITY	0.930 – 0.937
SOLUBILITY IN WATER	Insoluble (soluble in alcohol)
pH	
VAPOR DENSITY	
REFRACTIVE INDEX	1.450 - 1.456
FLASH POINT	> 130 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	Irritant. Irritating to eyes, respiratory system and skin.
EYE	Causes eye irritation. May cause chemical conjunctivitis.
SKIN	Causes skin irritation.
INGESTION	May cause gastrointestinal irritation with nausea, vomiting and diarrhea.
INHALATION	May be harmful if inhaled. Causes respiratory tract irritation.
CHRONIC	

TRANSPORT & REGULATORY INFORMATION

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

OTHER INFORMATION



gamma-DODECALACTONE

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.

Odor description of gamma-Dodecalactone: fatty peach sweet metallic fruity

SALES SPECIFICATION

APPEARANCE	Clear oily liquid
ASSAY	99.0% min
SPECIFIC GRAVITY	0.930 – 0.937
REFRACTIVE INDEX	1.450 - 1.456
ACID VALUE	2.0 max (mg KOH/g)

PACKING

PRICE

