# **4-HEXANOLIDE**

## SYNONYMS

5-Ethyldihydro-2(3H)-furanone; 4-Ethyl-4-butanolide; 4-Ethyl-4-hydroxybutanoic acid lactone; 4-Hydroxyhexanoic acid lactone; 5-Ethyldihydro-2(3H)-furanone; 5-Ethyltetrahydro-2-furanone; 6-Caprolactone; 1,4-Hexanolide; Tonkalide; Toukalide; gamma-Caprolactone; gamma-Ethyl-nbutyrolactone; gamma-Ethylbutyrolactone; gamma-Hexalactone; gamma-Hexanolactone; Hexan-4olide; gamma-Hexalactone; FEMA No. 2556;

## **PRODUCT IDENTIFICATION**

CAS RN	695-06-7; 57129-70-1
EINECS RN	211-778-8
FORMULA	$C_6H_{10}O_2$
MOLE WEIGHT	114.14

## PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Clear oily liquid
MELTING POINT	18 C
BOILING POINT	220 C
DENSITY	1.02 - 1.025
SOLUBILITY IN WATER	Slightly soluble.
рН	
VAPOR DENSITY	
REFRACTIVE INDEX	1.4370 - 1.4420
FLASH POINT	

## STABILITY AND REACTIVITY

STABILITY	Stable under normal conditions.
INCOMPATIBLE	Strong oxidizing agents, strong bases, strong acids.
MATERIALS	
DECOMPOSITION	Carbon oxides
PRODUCTS	
POLYMERIZATION	Has not been reported
NFPA RATINGS	

### 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	

## TRANSPORT & REGULATORY INFORMATION

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

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## **OTHER INFORMATION**

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 H<sub>2</sub>O 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	1.020 - 1.025
REFRACTIVE INDEX	1.4370 - 1.4420
ACID VALUE	1.0 max (mg KOH/G)

## PACKING

PRICE

