# delta-NONALACTONE

## **SYNONYMS**

6-Butyloxan-2-one; 5-Butyl-5-hydroxypentanoic acid lactone; 5-Butyl-delta-valerolactone; 5-Hydroxynonanoic acid delta-lactone; 5-Nonalactone; 5-Nonanolide; 6-Butyltetrahydro-2H-pyran-2-one; Hydroxynonanoic acid delta-lactone; delta-Butyl-delta-valerolactone; delta-Hydroxypelargonic acid lactone; FEMA No. 3356; FL No.: 10.014;

## **PRODUCT IDENTIFICATION**

CAS RN	3301-94-8; 105140-26-9
EINECS RN	221-974-5
FORMULA	C9H16O2
MOLE WEIGHT	156.22

## PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Clear oily liquid
MELTING POINT	
BOILING POINT	250 C
DENSITY	0.98 – 0.985
SOLUBILITY IN WATER	Insoluble (soluble in alcohol)
рН	
VAPOR DENSITY	
REFRACTIVE INDEX	1.4550 - 1.4650
FLASH POINT	> 110 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** SAFETY PHRASES

36/37/38 26-36

## OTHER INFORMATION

## delta-NONALACTONE

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.

Odor description of delta-Nonalactone: coconut sweet milky coumarin

## SALES SPECIFICATION

APPEARANCE	Clear oily liquid
ASSAY	98.0% min
SPECIFIC GRAVITY	0.98 – 0.985
REFRACTIVE INDEX	1.4550 - 1.4650
ACID VALUE	2.0 max (mg KOH/g)

## PACKING

PRICE