

<b>Chemical Nature</b>	Molecular formula:	C <sub>4</sub> H <sub>6</sub> O <sub>2</sub>
	CAS Number:	96-48-0
	EINECS No.:	202-509-5

<b>Product Specifications</b>	<b>Specifications</b>	<b>Value</b>	<b>Unit</b>	<b>Test method</b>
	Assay (GBL+ Methylbutyrolactone)	Min 99.7	%	Gas Chromatography
	Methylbutyrolactone	Max 0.3	Wt %	Gas Chromatography
	Water	Max 0.05	Wt %	ASTM E1064
	Color, APHA	Max 20	-	ASTM D1209
	1,4-Butanediol	Max 0.1	Wt %	Gas Chromatography
	Acid as Butyric Acid	Max 0.03	Wt %	ASTM D1613

<b>Physical Properties</b>	<b>Properties</b>	<b>Value</b>	<b>Unit</b>
	Melting Point	-43.5	°C
	Boiling Point	204 - 206	°C
	Density @ 20 °C	1.128	g/cm <sup>3</sup>
	Flash Point	106	°C
	Ignition Temperature	435	°C

**Description** Gamma-Butyrolactone (GBL) is a colorless liquid free of suspended matter. It is miscible with water, alcohols, ketones, esters and aromatic hydrocarbons. Solubility is limited in aliphatic and cycloaliphatic hydrocarbons.

**Safety** Gamma-Butyrolactone (GBL) is a strong mucous membrane irritant, as well as a mild skin irritant.

GBL can penetrate the epidermis and cause rashes or eczema.

GBL has a slightly narcotic effect.

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on safety.



## Applications

GBL serves as a chemical intermediate in the manufacture of all pyrrolidones.

It can be used in the production of pesticides, herbicides and plant growth regulators.

GBL may be formed as an intermediate in the production of vitamins and pharmaceuticals.

As a solvent, GBL can be used in/with:

- Pesticides
- Photochemical etching
- Electrolytes of small batteries or capacitors
- Viscosity modifiers in polyurethanes
- Surface etching of metal coated plastics
- Organic paint disbursements for water soluble inks
- PH regulators in the dyeing of wool and polyamide fibers
- Foundry chemistry as a catalyst during curing
- Curing agents in many coating systems based on urethanes and amides

## Packaging

Available in 230 kg non-returnable steel drums, 20,000 kg isotank and bulk by sea freight at minimum 300 mt.

## Storage & Handling

Gamma-Butyrolactone has a shelf life of 24 months in an unopened, original containers stored in a dry cool place and in a protected storage area. This product is neither explosive nor spontaneously flammable in air. However, it is combustible. Materials recommended for storage tanks are carbon steel, stainless steel and nickel.

Please refer to the Material Safety Data Sheet (MSDS) for more detailed information on handling and disposal.

## Note

The information in this publication is based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processor from carrying out own investigations and tests neither do these data imply any guarantee for certain properties nor the suitability of the product for a specific purposes. The processors are to ensure that any proprietary rights and existing laws and legislation are observed.

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