# Product Information L(+)-Lactic Acid

Food Grade

## **General Information**

Lactic acid is an organic acid occurring naturally in the human body and in fermented foods. The commercial production of lactic acid is typically done by fermentation. There are two optical forms of lactic acid existing whereby Jungbunzlauer has chosen to produce pure L(+)-lactic acid by traditional fermentation of natural carbohydrates. L(+)-lactic acid is better metabolised.

Jungbunzlauer L(+)-lactic acid is a mild tasting acidity regulator with flavour enhancing and antibacterial properties. It can be used in a wide range of food, personal care and chemical products. Jungbunzlauer L(+)-lactic acid is vegan and manufactured from renewable raw materials without the use of GMO.

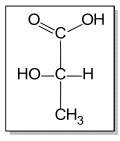
#### **Chemical Data**

Chem. Nomenclature S(+)-2-hydroxypropanoic acid Chem. Formula  $C_3H_6O_3$  Molecular weight 90.08 g/mol < 2 Density at 20°C  $1.11 - 1.13 \text{ g/cm}^3 (50 \%)$   $1.18 - 1.20 \text{ g/cm}^3 (80 \%)$ 

1.18 – 1.20 g/cm<sup>3</sup> (80 %) 1.19 – 1.21 g/cm<sup>3</sup> (88 %) 1.20 – 1.21 g/cm<sup>3</sup> (90 %)

201-196-2 (general 200-018-0) 79-33-4 (general 50-21-5)

E-No. E 270



#### Characteristics

EC No. CAS No.

Jungbunzlauer L(+)-lactic acid is a colourless to yellowish, nearly odourless, syrupy liquid with a mild acid taste. It is commercially available as aqueous solutions of various concentrations. These solutions are stable under normal storage conditions.

Lactic acid is non-toxic to human and the environment, but concentrated solutions of lactic acid can cause skin irritation and eye damage. They have thus to be labelled with a hazard pictogram and related statements. Lactic acid is readily biodegradable.

#### **Legal Aspects**

In Europe, lactic acid is listed as a generally permitted food additive (E 270) and may be added to all foodstuffs, following the "quantum satis" principle, as long as no special regulation restricts the use.

The US Food and Drug Administration (FDA) affirmed lactic acid as GRAS (generally recognized as safe) substance and permitted the use in food with no limitation other than current good manufacturing practice (CFR § 184.1061).

Lactic acid is classified and labelled according to GHS (Globally Harmonized System), implemented by the European Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures (CLP Regulation) as follows:

Pictogram:	Signal Word:	Hazard statement H315, H318:	Precautionary statements: P264, P280, P302 + P352, P332 + P313, P305 + P351 + P338, P310:
	Danger	Causes serious eye damage. Causes skin irritation.	Wear protective gloves/ protective clothing/ eye protection/ face protection. If skin irritation occurs: Get medical advice/ attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

### **Packaging and Storage**

Jungbunzlauer L(+)-lactic acid is currently supplied in bulk, in intermediate bulk containers (IBCs) with 1200 kg net weight (1100 kg net for 50% solution), in drums with 250 kg net weight (240 kg net for 50% solution) and small drums with 25 kg net content. We recommend not to triple stack the pallets.

Jungbunzlauer guarantees a shelf life of 36 months from production date for lactic acid if the product is stored in its original packaging at temperatures between 5 and 30 °C.

#### Standards and Certificates

Jungbunzlauer L(+)-lactic acid is Halal certified. A Halal certificate is available on request.

Jungbunzlauer L(+)-lactic acid is Kosher certified. A Kosher certificate is available on request. The Kosher certified Jungbunzlauer products carry a Kosher U on the original packaging. Kosher product in bulk is supplied as follows:

- For deliveries in bulk tank truck there is a specific (Kosher) material number, since the tank truck for transport of bulk Kosher material has to be maintained by Kosher wash.
- Kosher flexitank is labelled by a standard product label with a Kosher U.