Jungbunzlauer

Acidification and pH regulation

in beverages

Benefits at a glance

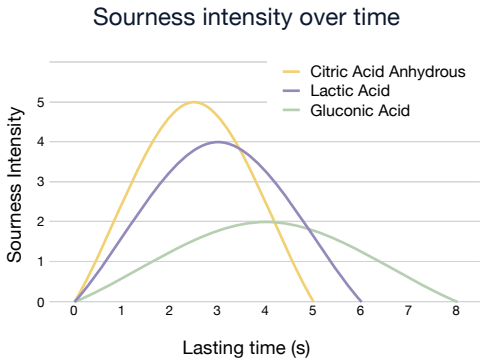
Natural acidification

- Different acids can **decrease pH at varying rates**, allowing for tailored acidification
- **Replacement of synthetic acids** with combinations of fermented acids for a more natural approach

Acid-sweetness balance

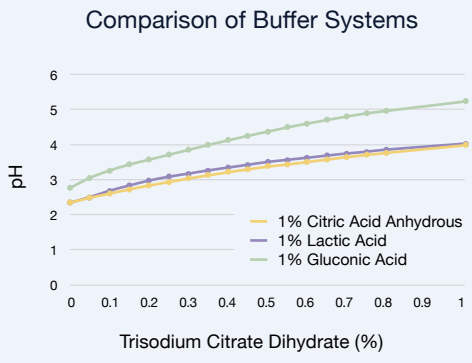
Achieving a **harmonious balance of sweetness and refreshing acidity** enhances flavour and supports the overall taste of the beverage

- Different acids provide **unique sourness intensity** and **duration**
- The combination of acids influences the overall acidic experience, helping to **counterbalance high-intensity sweeteners** and **prolong the perception of tartness**



pH control

- Regulating pH is essential for **product stability**, ensuring consistent quality and extended shelf life
- **Prevents oxidation** while preserving colour, flavour and nutrients
- Offers effective **buffering capacity** to maintain long-term product integrity
- Various buffer salts allow for **control in different pH ranges**



Jungbunzlauer ingredients in function

- Citric Acid Anhydrous
- Citric Acid Monohydrate
- LIQUINAT® (Citric Acid Solution)
- Trisodium Citrate
- Tripotassium Citrate
- Glucono-delta-Lactone
- Gluconic Acid
- Sodium Gluconate
- L(+)-Lactic Acid

Limitations in usage levels

EU

- Citric Acid (E330), Trisodium Citrate (E331), Tripotassium Citrate (E332), Glucono-delta-Lactone (E575), Gluconic Acid (E574), Sodium Gluconate (E576) and Lactic Acid (E270) are approved as food additives under Regulation (EC) No 1333/2008 and can be used in food products under the quantum satis principle
- It is recommended to check for any specific limitations applicable to certain food categories under Regulation (EC) No 1333/2008

USA

- The following ingredients are listed as GRAS (Generally Recognized As Safe) with no limitations other than current Good Manufacturing Practice (GMP) levels:
  - Citric Acid 21 CFR § 184.1033
  - Trisodium Citrate 21 CFR § 184.1751
  - Tripotassium Citrate 21 CFR § 184.1625
- Glucono-delta-Lactone is GRAS and permitted for use in food as curing or pickling agent, leavening agent, sequestrant, or pH control agent, with no limitations other than current GMP (21 CFR §184.1318)
- Sodium Gluconate is GRAS per 21 CFR § 182.6757 when used as a sequestrant or nutrient supplement
- Lactic Acid is GRAS and permitted for use in food except infant food with no limitation other than current GMP for use as antimicrobial agent, curing or pickling agent, flavor enhancer, flavoring agent or adjuvant, pH control agent, solvent or vehicle (21 CFR § 184.1061)

Value proposition

Natural preservation

Flavour enhancement

Natural acidification

Product stability

Replacement of synthetic acids

pH regulation

Acid-sweetness balance

Headquarters **Jungbunzlauer Suisse AG** · CH-4051 Basel · Switzerland · Phone +41 61 295 51 00
For further information please contact: headquarters@jungbunzlauer.com · www.jungbunzlauer.com