Zinc Lactate Dihydrate

A perfect choice for oral care products
Zinc Lactate Dihydrate - Applications

Zinc lactate dihydrate has several functions. Its antimicrobial qualities and ability to reduce or inhibit the formation of dental plaque make it ideal for use in dental care products. Also used as a nutrient in food or dietary supplement, organic zinc salts like zinc lactate are preferred over inorganic sources due to their superior bioavailability, physiological compatibility and nearly neutral taste.

Properties of Zinc Lactate Dihydrate

- White or almost white powder
- Practically odourless
- Nearly neutral taste
- High zinc content: 22 – 24.5%
- Good solubility (55 g/L)
- Highly bioavailable
- Antibacterial & anti-inflammatory
- Allergen and GMO free
- ECOCERT/COSMOS approved

Specification

- Zinc lactate is not currently listed in European or US Pharmacopeias.
- Jungbunzlauer zinc lactate specification reflects the requirements for food and oral care use.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Molecular formula</td>
<td>(C_3H_5O_3)_2 Zn · 2 H_2O</td>
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<tr>
<td>Molecular weight</td>
<td>279.58 g/mol</td>
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<tr>
<td>Mineral content</td>
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<td>CAS No</td>
<td>16039-53-5</td>
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<td>EC No</td>
<td>240-178-9</td>
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<tr>
<td>Quantity</td>
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<td>Granulation</td>
<td>powder</td>
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</table>

Zinc in oral care products

- Zinc helps prevent dental plaque and Gingivitis thanks to its bacteriostatic anti-microbial effect
- Zinc has an anti-tartar effect as the positively charged zinc ion (Zn^{2+}) inhibits tartar crystal growth
- Zinc shows an anti-malodor effect by inactivating volatile sulphur compounds (VSC), produced by oral bacteria
- Zinc lactate has a nearly neutral taste that is less bitter and astringent than inorganic zinc salts
- Zinc lactate has a high and stable solubility of 55 g/L, equivalent to 1.27 g zinc in 100 mL.

Zinc lactate dihydrate is the perfect choice for oral care applications