

## CALCIUM LACTATE PENTAHYDRATE PEARLS

### Description

Pentahydrate Pearls is the calcium salt of L(+) lactic acid produced by fermentation. The product shows excellent physical and technical properties. Its innovative shape allows high performance in terms of solubility, dissolution rate, floability and floodability.

### PHYSICO-CHEMICAL PROPERTIES

Chemical name		Calcium 2-Hydroxypropanoate pentahydrate
Molecular weight	<i>g/mol</i>	308
Molecular formula		C <sub>6</sub> H <sub>20</sub> O <sub>11</sub> Ca
Particle size	<i>µm</i>	99% between 100 - 710 µm
Solubility in water	<i>g/100 mL</i>	9
Solubility in water (1g/30 mL)	-	Passes test
Dissolution rate	<i>1000 mg/250 mL</i>	38 sec
Hydrate form		Penta
Form		Free flowing and non dusting powder
pH (5% solution)	-	6.0 - 8.0
Loss on drying	<i>% w/w</i>	22 - 27

### SENSORY CHARACTERISTICS

Color	-	White
Odor	-	Neutral
Taste	-	Neutral

### PURITY

Appearance of solution	-	Passes EP test
Positive test of calcium	-	Passes USP test
Positive test of lactate	-	Passes USP test
Calcium lactate content (as anhydrous)	<i>% w/w</i>	98 - 101
Calcium content (as anhydrous)	<i>% w/w</i>	16.5 - 20.1
Calcium content	<i>% w/w</i>	13.1 - 14.5
Heavy metals (as Pb)	<i>ppm</i>	Max. 5
Iron	<i>ppm</i>	Max. 80
Chloride	<i>ppm</i>	Max. 80
Sulphate	<i>ppm</i>	Max. 400
Phosphate	<i>ppm</i>	Max. 150
Lead	<i>ppm</i>	Max. 2
Arsenic	<i>ppm</i>	Max. 1
Mercury	<i>ppm</i>	Max. 1
Fluoride	<i>ppm</i>	Max. 15
Reducing substances (sugars)	-	Passes Fehling test
Volatile fatty acids	-	Passes EP test
Acidity - alkalinity	-	Passes FCC test (acidity)
Magnesium and alkali salts	<i>% w/w</i>	Max. 1
Mesophilic bacteria	<i>counts/g</i>	Max. 1000
Moulds	<i>counts/g</i>	Max. 100
Yeasts	<i>counts/g</i>	Max. 50

### REGISTRATION

E-code	E 327
CAS number	5743-47-5
GRAS status	Yes
Compliance	Dir. 2008/84/EC & Amendments - FCC VI JSFA - JEFCA - Kosher - Halal

### PACKAGING

25 kg multi-wall paper bags.

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