

# GALAXIUM PEARLS EXCEL

CLPRL5H / *galactic ref.*

CALCIUM LACTATE PENTAHYDRATE / *product name*

## DESCRIPTION

Galaxium Pearls Excel is the calcium salt of natural L(+) lactic acid produced by fermentation. Galaxium Pearls Excel has a very high purity which improves the solubility in various food applications while decreasing interactions such as oxidation and separation.

Its innovative shape allows high performance in terms of solubility, dissolution rate, floability and floodability. Galaxium Pearls Excel is formulated to exceed the highest quality standards of the food industry.

## 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 (@ 25°C/77°F)	<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 (5g product + 95g water)	-	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 test
Positive test of calcium	-	Passes test
Positive test of lactate	-	Passes 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. 25
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 test
Volatile fatty acids	-	Passes test
Acidity - alkalinity	-	Passes 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

Labeling	E 327
CAS number	28305-25-1
GRAS status	Yes
Complies with	Eur Reg 231/2012
*Latest edition	FCC* - JSFA* - JECFA* - Kosher - Halal

## PACKAGING

See packaging list

## STORAGE CONDITIONS

Dry, well ventilated room

## SHELF-LIFE

48 months

