

PURACAL® PP/FCC

Description	PURACAL is the highly soluble calcium salt of natural lactic acid, which is produced by fermentation. It is a white, non-hygroscopic product. PURACAL PP/FCC is the high quality food grade calcium lactate penta hydrate powder.	
	Product	calcium lactate
Specification	Hydrate form	penta
	Form	agglomerated powder
Visual sensory characteristics	Color fresh (powder)	white
	Odor	neutral
	Clarity of solution (Appearance of the solution)	passes test
	Color of solution	passes test
	Dirt (visual, reference)	max. 6 particles
	Taste	neutral
Identification	Assay	98.0-101.0 % (w/w) ¹⁾
	Assay calcium	13.4-14.5 % (w/w)
	Stereochemical purity (L-isomer)	min. 96 %
	Loss on drying	22.0-27.0 % (w/w)
	Identification calcium	passes test
	Identification lactate	passes test
	Solubility in water (1 g/30 ml)	passes test
	Solubility in ethanol (95%)	passes test
Purity	pH (5 g product + 95 g water)	6.0-8.0
	Alkalinity	passes test
	Volatile fatty acids	passes test
	Reducing substances	passes test
	Heavy metals (Pb)	max. 10 ppm
	Iron	max. 40 ppm
	Mercury	max. 1 ppm
	Lead	max. 0.4 ppm
	Fluoride	max. 15 ppm
	Arsenic (as As)	max. 1 ppm
	Barium	passes test
	Chlorides	max. 80 ppm
	Sulfate	max. 400 ppm
	Phosphates	max. 150 ppm
	Bromide	max. 20 ppm
	Magnesium and alkali salts	max. 1 % (w/w)
	Acidity, as lactic acid	max. 0.37 % (w/w) (passes test)
	Coliforms	absent in 1g
	TAMC	max. 1000 counts/g
	TYMC	max. 50 counts/g

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Physical-chemical- properties

Molecular formula
Molecular weight
Chemical name
Sieve analysis max. 500 µm

$(\text{CH}_3\text{CHOHCOO})_2\text{Ca}$
218 (anhydrous)
Calcium-L-2-hydroxy-Propionate
min. 98.0 %

Regulatory / Registration

CAS number
EEC Additive number
INS
GRAS status
Complies with

28305-25-1 (general 814-80-2)
E327 Calcium lactate
327 Calcium lactate
21CFR184.1207
FCC, JSFA, JECFA, 231/2012/EC

¹⁾ on dry substance (d.s.)