



ORIGINAL

Innophos Inc.  
1101 Arnold St Chicago Height, IL 60411  
Technical Support: (866) 631-7394

# Certificate of Analysis

**Product** Expandia © - Tricalcium Phosphate, Powder - FCC Grade Food Chemical Codex - Current Edition

**Trade Name** Expandia © R

<b>Product Code</b>	F240BG0028	<b>Mfg Location</b>	CH
<b>Legacy Code</b>	20058826	<b>Mfg Date</b>	05/15/2015
<b>Customer #</b>		<b>Relest Date</b>	05/14/2018
<b>Customer Code #</b>			
<b>PO #</b>			
<b>Shipment #</b>			
<b>Qty Shipped</b>	10800	<b>KG</b>	

Test	Result	Units	Min.	Max
Appearance	White, Odorless, Powder			
pH - 20% Slurry	7.2		6.2	
On USS 140 Mesh Sieve	0.0	%		0.2
On USS 325 Mesh Sieve	0.0	%		5.0
Particle Size d10	1.30	microns	1.00	1.50
Particle Size d50	3.74	microns	3.30	4.30
Particle Size d90	11.03	microns	11.00	14.80
Dibasic Salt/CaO	13.8	mls	13.0	14.3
Loss On Ignition	5.1	%		8.0
Assay (FCC)	39.0	%	34.0	40.0
Water Soluble	0.3	%		0.5
Pyrophosphate	0.02	%		
Fluoride	75 Max*	ppm		75
Acid Insoluble	0.03	%		0.20
Heavy Metals as Pb	30 Max*	ppm		30
Lead (ICP/MS)	0.25 Max*	ppm		0.25
Arsenic (ICP/MS)	2 Max*	ppm		3
Cadmium (ICP/MS)	1 Max*	ppm		1
Mercury (ICP/MS)	1 Max*	ppm		1
Sulfate	0.2 Max*	%		0.80
Chloride	330 Max*	ppm		1,400
Barium	Pass*			
Carbonate	Pass*			
Nitrate	Pass*			
Identification A	Pass*			
Identification B	Pass*			

\* Guaranteed analysis checked at intervals according to Plant Schedule.

1)The raw materials, manufacturing process and this product do not contain any of the solvents listed in the United States Pharmacopeia (USP), <467>, The European Pharmacopeia, and/or the International Conference of Harmonization (ICH), Q3c Residual Solvent (OVI) Lists. In addition, no other organic solvents are used or generated during the manufacturing process.

2)Pass/Fail Criteria As Follows: Identification A - Yellow Precipitate Formed, Identification B - Responds to the Flame test for Calcium, Barium - No Turbidity, Carbonate - No Effervescence, Nitrate -Blue Color not less than 5 Minutes.

Approved By: *John E. Sucker*

Title: QA Laboratory Manager

Approved On: 7/6/2015