



PRODUCT SPECIFICATION DATA SHEET



prayphos
PRAYPHOS™ TSPP 118 FG

DESCRIPTION

General Description TETRASODIUM PYROPHOSPHATE ANHYDROUS White, free-flowing powder		Date effective - edition February, 2012 - 02
Grade Food Grade	E number(s) E 450	Formula Na ₄ P ₂ O ₇
Molecular weight 265	EINECS 231-767-1	CAS number 7722-88-5

PRODUCT CHARACTERISTICS

Chemical properties	Unit	Typical analysis	Specifications	Methods
Assay (Na ₄ P ₂ O ₇) ignited basis	%	98.0	95.0 - 100.5	QWI.90015
Orthophosphate (Na ₂ HPO ₄)	%	0.5	2.0 Max.	QWI.90050
Loss on Ignition @ 800°C	%	0.1	0.5 Max.	QWI.90045
pH solution 1%	---	10.3	9.8 - 10.5	QWI.90052
Insoluble substances	%	<0.1	0.2 Max.	QWI.90071
Impurities content				
Pb	ppm	<1.0	2.0 Max.	QWI.90042
As	ppm	<1.0	3.0 Max.	QWI.90006
F	ppm	<50.0	50.0 Max.	QWI.90030
Heavy metals (as Pb)	ppm	<10.0	10.0 Max.	QWI.90036
Physical properties				
Bulk density	g/cm ³ lbs/ft ³	0.8 50	0.6 - 0.9 37 - 56	QWI.90017 Calculation
Granulometry USSS				
Cumulative retained on :				
840 µm (20 US mesh)	%	<0.1	0.2 Max.	
149 µm (100 US mesh)	%	0.3	10.0 Max.	QWI.90059
Thru 53 µm (270 mesh)	%	73.0	65.0 Min.	

THEORETICAL VALUES

Solubility	5.6 g/100 g water @ 20°C
Na₂O content	47.0%

IDENTIFICATION TEST

Positive tests for sodium and phosphate



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STORAGE & SHELF LIFE

Store in a cool and dry place. Keep in the packaging of origin, shrink-wrapped.
Best before: 2 years after production date.

KEY PROPERTIES

~ Alkalinity
~ Sequestrant
~ Protein Modifier
~ Buffering Agent
~ Dispersing Agent
~ Coagulant

APPLICATIONS

~ Processed Meat, Poultry, and Seafood: TSPP is used to retain moisture during storage, thawing, and cooking. TSPP also increases shelf life by sequestering multivalent cations responsible for lipid oxidation and rancidity.
~ Whipped Toppings and Milk Foams: TSPP is added to improve whipping efficiency and improve foam stability.
~ Process Cheese Products: Granular TSPP helps to buffer the pH of the processed cheese and interacts with milk proteins to promote emulsification.
~ Produce: TSPP sequesters iron in potato products to prevent after-cooking blackening and to stabilize color.
~ Ice Cream and Frozen Desserts: To maintain fat dispersion in the mix, TSPP may be added so "churning" will not form lumps of butter during freezing.
~ TSPP is approved as GRAS (generally recognized as safe) by the FDA in 21 CFR 182.6789.
~ TSPP is approved for use as a component of coatings in 21 CFR 175.210.
~ Potable Water Treatment: Prayon Tetrasodium Pyrophosphate conforms to the requirements of NSF/ANSI Standard 60. Used for corrosion and scale control and sequestering. Maximum use level 14 mg/L.

Plant location	Augusta, GA-USA
Packaging types	Multiwall bags or supersacks
Handling precautions	see MSDS

CERTIFICATIONS

ISO 9001 (Quality) - Kosher (Pareve, Passover) - Halal - NSF/ANSI Standard 60 (only for approved products)

REGULATIONS & STATEMENTS

Meets the requirements of the Food Chemicals Codex (FCC) current edition.
GMO free - Allergen free - BSE/TSE free - Mineral origin

MISCELLANEOUS

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