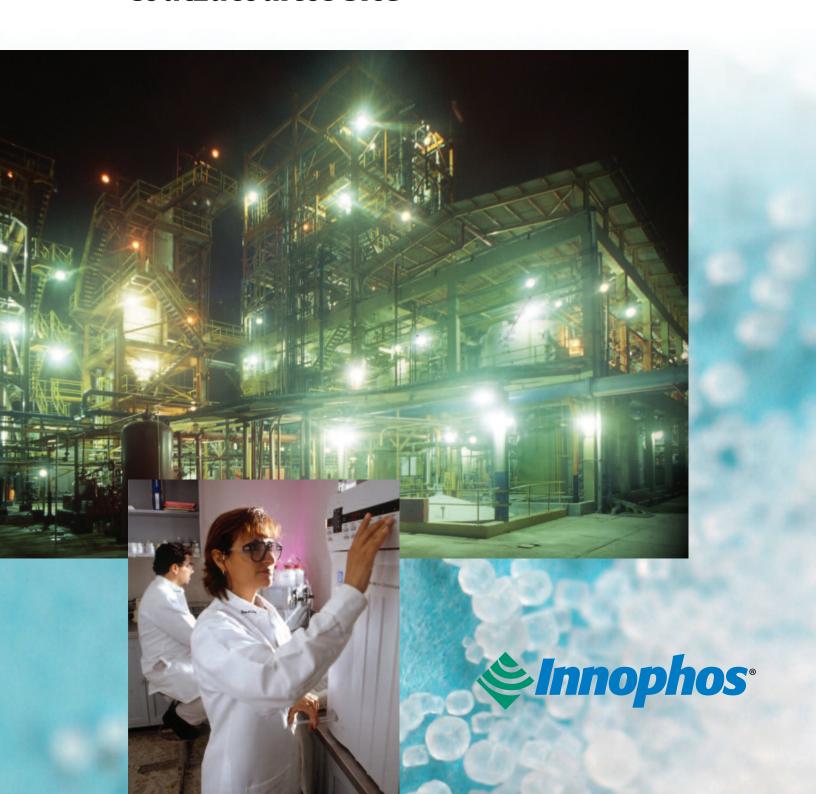
Phosphate Salts From Innophos Mexicana

Coatzacoalcos Site





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About Innophos

Innophos, (Nasdaq symbol IPHS), is a leading producer of specialty grade phosphate products for the Food, Pharmaceutical and Industrial market segments. Within these segments our products cover a broad range of applications including, consumer goods, water, paper and metal treatment, agriculture, textiles, and detergents. For example, specialty phosphates act as flavor enhancers in beverages, leavening agents in baked goods and cleaning agents in toothpaste. Innophos has production sites in Mexico, Canada, and the USA.



The Coatzacoalcos Site

The Coatzacoalcos site in the state of Veracruz, Mexico, has six production units plus auxiliary service areas. Our infrastructure includes electricity generation, ample storage capacity for raw materials and finished products as well as maintenance shops.

The Coatzacoalcos Sulfuric acid and Phosphoric acid plants began operations in 1969 as Fertilizantes Fosfatados Mexicanos (FFM). FFM merged with Guanos y Fertilizantes de Mexico (Guanomex) to form the Mexican government owned Fertimex in 1977. The technical grade Phosphoric acid (PWA) plant, was started up in 1971. In 1992, Troy Industrias acquired the facility, and in 1994 formed a joint venture with Albright & Wilson (A&W Troy). In 1998 Albright & Wilson purchased the Troy Industrias interest and on March 14th, 2000 Rhodia acquired Albright & Wilson. The plant operated as a Rhodia facility until Innophos was created on August 16th, 2004.

The Coatzacoalcos site specializes in producing many grades of Phosphoric acid and Phosphate salts. The site consists of a series of upstream production units to ensure both competitive costs and security of supply. Sulfuric acid is produced by burning Sulfur sourced locally which is then used to convert Phosphate rock into Phosphoric acid. Phosphoric acid is purified and sold or converted to derivative products (e.g. Specialty Phosphate intermediates, Complex Phosphate salts and water soluble fertilizers).

Coatzacoalcos is ideally located on the east side of Mexico, on the Gulf Coast at the southern end of the Bay of Campeche. It is situated in Mexico's primary oil and gas producing region, approximately 230 kilometers southeast of Veracruz. The plant site covers 44 hectares in the middle of the Pemex Complejo Industrial Pajaritos, a hydrocarbon processing industrial complex that is approximately 3 km east of downtown Coatzacoalcos.

The Ortho Phosphates Salts Plant

As one of Innophos' six plants at the site, the Orthophosphates plant (Salts plant) produces high quality crystallized technical and food grade salts and has GMP, Kosher and Halal certifications. Grades produced include food and technical Monoammonium Phosphate (MAP), Diammonium Phosphate (DAP), Monopotassium Phosphate (MKP). The Salts plant also produces Monosodium Phosphate (MSP), Disodium Phosphate (DSP), and Trisodium Phosphate (TSP). These salts have a variety of uses, including food, specialty fermentation processes, sports drinks, fertilizers, and fire retardants.

The Salts plant is the largest of its kind in the Americas for these products. Purified grade or FCC grade phosphoric acid (PWA) is reacted with ammonia, potassium hydroxide, or sodium hydroxide (depending upon the desired product) as follows:

 $\begin{array}{lll} \text{H}_3\text{PO}_4 + \text{NH}_3 \implies \text{NH}_4\text{H}_2\text{PO}_4 & \text{Monoammonium Phosphate} \\ \text{H}_3\text{PO}_4 + 2\text{NH}_3 \implies (\text{NH}_4)_2\text{HPO}_4 & \text{Diammonium Phosphate} \\ \text{H}_3\text{PO}_4 + \text{KOH} \implies \text{H}_2\text{O} + \text{KH}_2\text{PO}_4 & \text{Monopotassium Phosphate} \\ \text{H}_3\text{PO}_4 + \text{NaOH} \implies \text{H}_2\text{O} + \text{NaH}_2\text{PO}_4 & \text{Monosodium Phosphate} \\ \text{H}_3\text{PO}_4 + 2\text{NaOH} \implies 2\text{H}_2\text{O} + \text{Na}_2\text{HPO}_4 & \text{Disodium Phosphate} \\ \text{H}_3\text{PO}_4 + 3\text{NaOH} \implies 2\text{H}_2\text{O} + \text{Na}_3\text{PO}_4 & \text{Trisodium Phosphate} \\ \text{H}_3\text{PO}_4 + 3\text{NaOH} \implies 3\text{H}_2\text{O} + \text{Na}_3\text{PO}_4 & \text{Trisodium Phosphate} \\ \end{array}$

Products are available in 25Kg, 50lb, 1Metric ton and 2000 lb bags, consolidated in full container loads for ocean shipments or as break bulk in box trucks containers, or rail cars. Upon customer request, the MAP and DAP can also be shipped in bulk rail hopper cars.

PRODUCTS AND SPECIFICATIONS

AMMONIUM PHOSPHATES	Formula	Grade	Nomenclature	CAS#/ Index Name	ASSAY	P ₂ 0 ₅ Content (Typical)	pH (Typical)	Molecular Weight
DIAMMONIUM PHOSPHATE	(NH ₄) ₂ HPO ₄	FG	Diammonium Phosphate Ammonium Phosphate Dibasic	7783-28-0 Phosphoric Acid, Diammonium Salt	96.0%-102.0%	53.0% Min.	8.0	132.1
DIAMMONIUM PHOSPHATE	(NH ₄) ₂ HPO ₄	TG	Diammonium Phosphate Ammonium Phosphate Dibasic	7783-28-0 Phosphoric Acid, Diammonium Salt	25.0% Min. (NH ₃)	53.0% Min.	8.0	132.1
DIAMMONIUM PHOSPHATE POWDER with 2% TCP	(NH ₄) ₂ HPO ₄	FG	Diammonium Phosphate with Tricalcium Phosphate	7783-28-0 Diammonium Phosphate		52.0% Min.	8.0	132.1
DIAMMONIUM PHOSPHATE POWDER with 2% TCP	(NH ₄) ₂ HPO ₄	TG	Diammonium Phosphate DAP	7783-28-0 Diammonium Phosphate	24.5% Min. (NH ₃)	52.0% Min.	8.0	132.1
MONOAMMONIUM PHOSPHATE	NH ₄ H ₂ PO ₄	FG	Monoammonium Phosphate Ammonium Phosphate Monobasic	7722-76-1 Phosphoric Acid, Monoammonium Salt	96.0%-102.0%	61.0% Min.	4.6	115.0
MONOAMMONIUM PHOSPHATE	NH ₄ H ₂ PO ₄	TG	Monoammonium Phosphate Ammonium Phosphate Monobasic	7722-76-1 Phosphoric Acid, Monoammonium Salt	14.5% Min. (NH ₃)	61.0% Min.	4.6	115.0
MONOAMMONIUM PHOSPHATE POWDER with 2% TCP	NH ₄ H ₂ PO ₄	FG	Monoammonium Phosphate with Tricalcium Phosphate	7722-76-1 Monoammonium Phosphate		60.0% Min.	4.8	115.0
MONOAMMONIUM PHOSPHATE POWDER with 2% TCP	NH ₄ H ₂ PO ₄	TG	Monoammonium Phosphate with Tricalcium Phosphate	7722-76-1 Monoammonium Phosphate	14.3% Min. (NH ₃)	60.0% Min.	4.8	115.0
POTASSIUM PHOSPHATES	Formula	Grade	Nomenclature	CAS#/ Index Name	ASSAY	P ₂ O ₅ Content (Typical)	pH (Typical)	Molecular Weight
MONOPOTASSIUM PHOSPHATE	KH ₂ PO ₄	TG	MKP	7778-77-0	95% Min.	50.3%	4.2-4.7	136.1
MONOPOTASSIUM PHOSPHATE	KH ₂ PO ₄	FG	MKP	7778-77-0	98% Min.	51.9%	4.5	136.1
SODIUM PHOSPHATES	Formula	Grade	Nomenclature	CAS#/ Index Name	ASSAY	P ₂ O ₅ Content (Typical)	pH (Typical) Calcium	Molecular Weight
DISODIUM PHOSPHATE, ANHYDROUS	Na ₂ HPO ₄	FG	Disodium Phosphate Anhydrous Sodium Phosphate Dibasic Anhydrous Disodium Orthophosphate	7758-79-4 Phosphoric Acid, Disodium Salt	98% Min.	50%.	9.1	142.0
DISODIUM PHOSPHATE, ANHYDROUS	Na ₂ HPO ₄	TG	Disodium Phosphate Anhydrous Sodium Phosphate Dibasic Anhydrous Disodium Orthophosphate	7758-79-4 Phosphoric Acid, Disodium Salt	48% Min.	50%	9.1	142.0
DISODIUM PHOSPHATE, DUOHYDRATE	Na ₂ HPO ₄ •2H ₂ O	FG	Dibasic Sodium Phosphate Duohydrate Disodium Orthophosphate Duohydrate Disodium Hydrogen Phosphate Duohydrate	10028-24-7 Phosphoric Acid, Disodium Salt, Dihydrate	98% Min.	39.9%	9.1	178.1
MONOSODIUM PHOSPHATE, ANHYDROUS	NaH ₂ PO ₄	FG	Monosodium Phosphate Anhydrous Sodium Phosphate Monobasic Anhydrous Monosodium Orthophosphate	7558-80-7 Phosphoric Acid, Monosodium Salt	98%-103%	58.8%	4.5	120.1
MONOSODIUM PHOSPHATE, ANHYDROUS	NaH ₂ PO ₄	TG	Monosodium Phosphate Anhydrous Sodium Phosphate Monobasic Anhydrous Sodium Biphosphate Monosodium Orthophosphate	7558-80-7 Phosphoric Acid, Monosodium Salt	95% Min.	58% Min.	4.7	120.0
TRISODIUM PHOSPHATE, DODECAHYDRATE	4(Na ₃ PO _{4*} 12H ₂ O)NaOH	TG	Trisodium Phosphate Dodecahydrate	10101-89-0 7601-84 Phosphoric Acid, Trisodium Salt, Dodecahydrate Phosphoric Acid, Trisodium Salt	92% Min.	41% Min.	11.6-12.6	1560.4
TRISODIUM PHOSPHATE, ANHYDROUS	Na ₃ PO ₄	TG	Trisodium Phosphate Anhydrous Sodium Phosphate Tribasic Anhydrous Trisodium Orthophosphate Anhydrous	7601-54-9 Phosphoric Acid, Trisodium Salt	95.0% Min.	41.0%-43.4%	11.7-12.5	163.9
TRISODIUM PHOSPHATE, DODECAHYDRATE	4(Na ₃ PO ₄ •12H ₂ O)NaOH	FG	Trisodium Phosphate Dodecahydrate Sodium Phosphate Tribasic Dodecahydrate	7601-54-9 Trisodium Phosphate, Hydrate	90.0% Min.	18.3% Min.	11.8	1560.4

For products manufactured outside of North America, please refer to the information on the back cover or visit our website at: www.innophos.com

chnical Grade = TG Food Chemicals Codex = FCC

 $\mathsf{NSF} \, \mathsf{International} = \mathbf{NSF}$

Food Grade = FG

National Formulary = **NF**

United States Pharmacopeia = **USP**

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Mexico and Latin America

Bosque de Ciruelos 186- 11° Piso, Colonia: Bosques de las Lomas México DF CP 11700, México

Patricia Valdés, Sales Manager patricia.valdes@innophos.com.mx Phone: (52) 555322 4808

María Luisa Ortega, Customer Service maria.ortega@innophos.com.mx

Phone: (52) 555322 4810

USA and Canada

259 Prospect Plains Road Cranbury, New Jersey 08512 USA P.O. Box 8000, 08512-8000 USA Phone: +1 609-495-2495 Fax: +1 609-860-0138

email: spcustomerservice@innophos.com

Europe, Middle East, Africa

Günter Becker Regional Sales Manager gunter.becker@innophos.com Phone: +49 613 162 21033 Cell Phone: +49 151 229 13034

Asia and Oceania

Joanne Lim Regional Sales Manager joanne.lim@innophos.com Phone: +65 97346235

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