

Initial Information about Market Access Requirements for Exporting Fertilizers into the United States (non-exhaustive)

Preliminary Overview

December, 2019

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Introduction



- The primary objectives of this compilation are:
 - To provide preliminary information about issues to be considered when thinking about exporting fertilizers from Jordan into the U.S.
 - To provide websites and links, which include more detailed information for the possibility of deeper understanding and elaboration for interested targetgroups/companies
- The entire situation with reference of exporting fertilizers into the U.S. is by far not clear with the documents found at the web; further sources should be consulted, e.g. AmCham in Jordan

What are the regulations for importing fertilizers into the USA?



source: https://ask.usda.gov/s/article/what-are-the-regulations-for-importing-fertilizers-into-the-united-states

- Depending on the intended end-use and precise nature of ingredients in your formulations, the importation of fertilizers into the United States (U.S.) may require approval from the United States Department of Agriculture (USDA)'s Animal and Plant Health Inspection Service (APHIS) and/or the U.S. Environmental Protection Agency (EPA).
- APHIS regulates imported formulations that claim any microbial/biological properties, while EPA regulates the import of commercial products for sale or field release that have chemical fertilizer/plant growth promotion properties. Since EPA regulates most fertilizer products, we recommend you contact that agency first. You can find information, including contacts, at: Importing or Exporting Chemical Substances under TSCA.
- If a fertilizer product contains microbial ingredients, the importer must submit an "Application for Permit to Move Live Plant Pests or Noxious Weeds" (APHIS-Plant Protection and Quarantine (PPQ) Form 526). For additional information, contact the APHIS-PPQ Pest Permitting Branch at 301-851-2357, 866-524-5421, or Pest.Permits@aphis.usda.gov
- If a product intended for sale is labeled as organic, it must first be approved by the National Organic Program (NOP) of USDA's Agricultural Marketing Service (AMS).
- In the event your products are approved by the appropriate regulatory agencies, note that only U.S. citizens may apply for permits to import products into the United States.

Fertilizers and Importing of Fertilizers -- I



source: https://www.ers.usda.gov/topics/farm-practices-management/fertilizers-pesticides/

- Nitrogen, phosphate, and potash are essential in the production of crops used for food, feed, fiber, and fuel. Applied annually, most of these nutrients are absorbed by the crop, but when applied in excess, they can be lost to the environment through volatilization into the air, leaching into ground water, emission from soil to air, and runoff into surface water. These losses can be reduced by adopting best management practices (BMPs) that increase nutrient accessibility and enhance plants' ability to uptake the nutrients, and more closely match nutrient applications with agronomic needs.
- ERS gathers information on onfarm use of fertilizers through USDA's Agricultural Resource Management Survey (ARMS). Producers of nine major field crops barley, corn, cotton, oats, peanuts, rice, sorghum, soybeans, and wheat—are contacted in selected years. ERS reports on nutrient applications and application methods for synthetic fertilizers and manure in ARMS Farm Financial and Crop Production Practices tailored reports, which also provide survey documentation and access to the questionnaires.

Fertilizers and Importing of Fertilizers -- II



source: https://www.ers.usda.gov/topics/farm-practices-management/fertilizers-pesticides/

- ERS uses the same ARMS source to develop estimates of fertilizer application costs for each of the nine major field crops surveyed and reports these estimates in the **Commodity Costs and Returns** data product.
- ERS combines ARMS-based estimates with data drawn from other public and proprietary sources to report annual estimates of total fertilizer use in U.S. agriculture in the Fertilizer Use and Price data product. Tables in that product report total use by nutrient, application rates per acre for selected crops, fertilizer materials use, and fertilizer prices. In turn, those data are used to support development of indexes of annual fertilizer use in U.S. agriculture, for reporting in the data product Agricultural Productivity in the U.S.

Fertilizers and Importing of Fertilizers -- III



Articles Exclusion. If you are importing products that are classified as hazardous substances but are part of articles, you are subject to TSCA certification requirements only if certification for your product is specifically required by a rule or order promulgated under the TSCA. No specific rules have been adopted at this time. An "article" is a manufactured item 1) that is formed into a specific shape or design during manufacture, 2) that has end-use functions dependent on the shape or design during end use, and 3) that during the end use, does not change in its chemical composition or that changes only for a noncommercial purpose separate from the article and only as allowed by law (19 CFR 12.120(2)). Fluids and particles are not articles, regardless of shape or design.

Fertilizers and Importing of Fertilizers -- IV



Shipment Detention. A shipment of chemical fertilizer will be detained at the U.S. port of arrival (or entry if same), at your risk and expense, if: 1) it contains banned chemical substances (15 USC 2604, 2605); or 2) it contains chemical substances ordered seized because of imminent hazards (15 USC 2606). Further detention will occur at the port of entry, again at your risk and expense, if: 1) the EPA administrator or Customs port director has reasonable grounds to believe the shipment is not in compliance with the TSCA; or 2) you do not provide proper TSCA certification.

If your shipment is detained, it will be held by Customs for no more than 48 hours. It will then be turned over to the EPA administrator, unless you have arranged to release it in bond. You must either bring it into TSCA compliance or reexport it within the earlier of 90 days after notice of detention or 30 days of demand for redelivery. Customs may grant an extension if failure to comply or reexport is the result of delays in EPA or Customs procedures. If you fail to comply or reexport within the time allowed, the EPA administrator is authorized to have the shipment stored or disposed of at your expense.

Fertilizers and Importing of Fertilizers -- V



Hazardous Consumer Products, Under the Federal Hazardous Substances Act (FHSA), a fertilizer intended for the consumer market is a hazardous substance if it is flammable, combustible, or has the potential to cause substantial personal injury during, or as a proximate result of, any customary or reasonably foreseeable handling or use. The CPSC does not require permits, special invoicing, limited entry, licenses, or any special approval process for importing hazardous consumer products into the U.S. However, if you are importing these types of products, you are responsible for ensuring that they meet all applicable FHSA and Consumer Product Safety Act (CPSA) requirements. There are detailed regulations regarding testing and labeling of hazardous products. The Commission's enforcement posture regarding compliance with labeling and product safety standards changes as new facts become available. Contact the CPSC (see addresses at end of this chapter) for specific requirements on the consumer product you are considering importing.

Fertilizers and Importing of Fertilizers -- VI

16.0



Substantial Product Hazard Reports. Defect-reporting is required for products covered under the CPSA. The law requires every manufacturer, distributor, or retailer of such products, who obtains information that reasonably supports the conclusion that such products fail to comply with an applicable consumer product safety rule, or contain a defect that could create a substantial product hazard, to immediately inform the CPSC of the potential violation or defect. A firm's willful failure to make a Substantial Product Hazard Report can result in litigation by the CPSC.

10.00

Customs Classification

For customs purposes, fertilizers are classified under Chapter 31 of the HTSUS. This chapter is broken into major headings, which are further divided into subheadings, and often sub-subheadings, each of which has its own HTSUS classification number. For example, the 2001 HTSUS number for potassium chloride fertilizer is 3104.20, indicating it is a subcategory of potassic mineral Fertilizers and Importing of Fertilizers -- VII



or chemical fertilizers (3104). There are five major headings within Chapter 31.

- 3101—Animal or vegetable fertilizers, whether or not mixed together or chemically treated; fertilizers produced by the mixing or chemical treatment of animal or vegetable products
- 3102-Mineral or chemical fertilizers, nitrogenous
- 3103-Mineral or chemical fertilizers, phosphatic
- 3104-Mineral or chemical fertilizers, potassic
- 3105—Mineral or chemical fertilizers containing two or three of the fertilizing elements nitrogen, phosphorus, and potassium; other fertilizers; goods of this chapter in tablets or similar forms or in packages of a gross weight not exceeding 10 kg



For more details regarding classifications of the specific product you are interested in importing, consult a customs broker, the appropriate commodity specialist at your nearest customs port, or the HTSUS. The 2001 HTSUS is available online from the Customs Service (www.customs.gov/impoexpo/impoexpo.htm) or for purchase from the U.S. Government Printing Office (see resources at the end of this chapter), and may be found in larger public librar-

Commercial Fertilizers



source: https://www.epa.gov/agriculture/agriculture-nutrient-management-and-fertilizer source: https://www.epa.gov/nutrient-policy-data/commercial-fertilizer-purchased

- Commercial Fertilizer Purchased Fertilizer is a primary source of nitrogen and phosphorus. It often reaches surface and groundwater systems through farm or urban/suburban runoff or infiltration. Fertilizer use and run-off can be significantly reduced by appropriate fertilizer application through:
 - ✓ implementing best management practices
 - ✓ employing precision agriculture methods.
 - On the following pages: Amounts of fertilizer P₂O₅ purchased by states in individual years 2003, 2005, 2007, 2009 and 2011, and the % change in average amounts purchased per year from 2002–2006 to 2007–2011. Fertilizer information is reported by state fertilizer control offices and excludes livestock manure, liming materials, peat, potting soils, soil amendments, soil additives, and soil conditioners.

General issues about Importing Chemicals to the USA



source: http://www.gaebler.com/Importing-Chemicals-Into-the-United-States.htm

- Lots of businesses turn a profit from bringing chemicals into the USA. But as you
 might expect, the federal government imposes strict regulations on importers of
 chemicals and toxic substances.
- If you think the idea of importing chemicals into the U.S. sounds dicey, you're on the right track.
- The federal government is very concerned about the transportation of chemical substances across American borders. Consequently, the regulations that govern imported chemicals are stricter than the regulations governing other types of foreign goods and merchandise.
- When it comes to chemical imports, the government has a couple of concerns. In addition to making sure that the goods are transported safely, customs wants to ensure that imported chemicals won't harm the environment or American consumers. For importers, that means navigating regulations that can seem dense and burdensome.

TSCA Overview for Chemicals



source: http://www.gaebler.com/Importing-Chemicals-Into-the-United-States.htm

- Chemical importers are subject to regulations defined by the Toxic Substances Control Act of 1976 (TSCA). The sole purpose of this legislation is to control the use and production of chemicals that may pose a risk to the health of U.S. citizens or the environment. For TSCA purposes, the term "manufacturing" includes import activities – and that means importers must meet all of the same requirements as chemical manufacturers.
- The Environmental Protection Agency (EPA) overseas a mind-boggling number of industrial chemicals (75,000+) and if the EPA deems that a chemical creates a significant environmental risk, it's manufacture and import can be banned entirely.

Requirements for Imports of Chemicals



source: http://www.gaebler.com/Importing-Chemicals-Into-the-United-States.htm

- Chemical importers may be required to submit their products to a registration and inspection process. This process is intended to determine whether the chemicals being received into the U.S. pose a hazard or violate import restrictions. No single federal agency is responsible for enforcing chemical import compliance, but importers typically deal with a combination of customs, EPA and DOT agencies.
- When your shipment arrives at a U.S. port, you will be required to declare its contents and certify that it complies with chemical importing guidelines. Customs or other agencies may then conduct their own testing to verify your declarations. If an imported shipment does not comply with chemical import restrictions, the shipment will be seized, and the importer may be subject to fines and other penalties.

TSCA Import Certification Requirements



source: https://www.epa.gov/tsca-import-export-requirements/tsca-requirements-importing-chemicals#tsca

- Imports of chemical substances, mixtures or articles that contain a chemical substance or mixture must comply with the Toxic Substances Control Act (TSCA) in order to enter the U.S. Importers must certify that imported chemicals either comply with TSCA (positive certification) or, if not otherwise clearly identified as a chemical excluded from TSCA, are not subject to TSCA (negative certification).
- The requirements are described in section 13 of the Toxic Substances Control Act (TSCA) (15 U.S.C. 2612) and in implementing regulations developed by the U.S. Customs and Border Protection (CBP), in consultation with EPA, at 19 CFR 12.118 through 12.127. In addition, EPA has a companion policy statement on chemical imports at 40 CFR 707.20.





source: https://www.epa.gov/tsca-import-export-requirements/tsca-requirements-importing-chemicals#tsca

- A certification must be signed and filed electronically or in writing with CBP by the importer or an authorized agent of the importer. A certification must also include the certifier's name, email address, and telephone number. Certification is required for substances that are imported and are received by mail or commercial carrier, including those intended for research and development.
- Certifications filed electronically must be filed in the Automated Commercial Environment (ACE).
- For paper certification, the statement must be typed, preprinted on the invoice, or otherwise included in the entry documentation and must be filed with the director of the port of entry before release of the shipment.

Certification Statements



source: https://www.epa.gov/tsca-import-export-requirements/tsca-requirements-importing-chemicals#tsca

An importer's statement must certify either that the chemical shipment is:

- subject to TSCA and complies with all applicable rules and orders (positive certification)
- or that the chemical shipment is not subject to TSCA (negative certification)

Positive Certification Statements



source: https://www.epa.gov/tsca-import-export-requirements/tsca-requirements-importing-chemicals#tsca

The following is a **positive certification statement**:

- "I certify that all chemical substances in this shipment comply with all applicable rules or orders under TSCA and that I am not offering a chemical substance for entry in violation of TSCA or any applicable rule or order thereunder."
- A positive certification means that the chemical substance complies with all applicable TSCA regulations, including:
 - Section 5 premanufacture notification rules
 - Section 5 significant new use rules
 - Section 5(e) orders
 - Section 5(f) rules and orders
 - Section 6 rules and orders
 - Section 7 judicial actions
 - Title IV rules and orders
- Note that sections 4 and 8 rules do not pertain to section 13 import certification requirements. Although importers must satisfy all applicable requirements of sections 4 and 8 rules, compliance with those provisions is not related to individual chemical shipments and therefore does not affect import certification.

Negative Certification Statements



source: https://www.epa.gov/tsca-import-export-requirements/tsca-requirements-importing-chemicals#tsca

The following is a negative certification statement.

- "I certify that all chemicals in this shipment are not subject to TSCA."
- A negative certification is required for the following products when not clearly identified:
 - Any pesticide
 - Any food, food additive, drug, cosmetic or device
 - Source material, special nuclear material, or by-product material
 - Firearms and ammunitions as defined in section 3 of TSCA
- Note that these products may be considered clearly identified when they are associated with another relevant agency's entry documentation or electronic entry filing requirements (e.g., Notice of Arrival for pesticides or applicable entry documentation for FDA regulated products).

No certification is required for the following:

- Chemicals that are a part of articles, unless required by a specific rule under TSCA
- Tobacco or tobacco products

Fertilizer Emission Scenario Tool for crop management system scenarios



source: https://www.epa.gov/air-research/fertilizer-emission-scenario-tool-crop-management-system-scenarios

What is the Fertilizer Emission Scenario Tool?

 The Fertilizer Emission Scenario Tool for CMAQ (FEST-C) is a high-end computer interface that simulates daily fertilizer application information for any gridded domain. It has been applied in the U.S., southern Canada and northern Mexico and China. It integrates the Weather Research and Forecasting (WRF) model and the Community Multi-scale Air Quality (CMAQ) model with agricultural land management and land use.

What are the benefits of using FEST-C?

 FEST-C guides users through daily fertilizer simulation processes based on an adaptation of the USDA Environmental Policy Integrated Climate (EPIC) model. Users can assess not only the impacts of agricultural fertilization and management practices on air quality, but also the impacts of meteorology and air quality on crop yield, soil erosion, and overall nitrogen, carbon and phosphorus biogeochemical status of the agricultural ecosystem.

Who should use FEST-C?

 FEST-C is designed for the CMAQ user community and scientists and resource managers who need spatially complete and consistent regional-scale estimates of nitrogen and phosphorus losses to air and water, ecosystem services, and human health endpoints.

How does FEST-C work?

FEST-C is a Linux-based tool set with a Java-based interface and EPIC modeling system. The EPIC interface contains 13 sub-interface tools that guide users through the simulation process. It uses the current release of the Spatial Allocator Raster Tool system to link with several remotely sensed land use and land cover data sets.

Import of Pesticides and Devices into the USA -- I



source: https://www.epa.gov/compliance/importing-and-exporting-pesticides-and-devices

- All pesticides and devices imported into the United States must: Comply with U.S. pesticide law
- Be registered with EPA, except where exempted by regulation or statute (e.g. minimum risk pesticides) and as follows:
 - Unregistered pesticides may be imported under certain conditions if intended for export (PR Notice 99-1)
 - Emergency exemptions
- Not be adulterated or otherwise violative
- Properly labeled (in accordance with U.S. domestically produced pesticide labeling requirements)
- Produced in an EPA-registered establishment that files annual reports with the Agency

Import of Pesticides and Devices into the USA -- II



source: https://www.epa.gov/compliance/importing-and-exporting-pesticides-and-devices

- EPA (United States Environmental Protection Agency) regulates pesticides under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). FIFRA section 17 Exit governs the import of pesticides and devices into, and the export of pesticides and devices from, the United States.
- As of September 30, 2016 (see Federal Register: Notice of Arrival for Importations of Pesticides and Pesticidal Devices), the importer must choose one of the following options: Submit the Notice of Arrival of Pesticides and Devices (NOA) information electronically through the Automated Commercial Environment (ACE) with the entry documentation
- Notify EPA of the arrival of imported pesticides and devices through the paper NOA form (EPA Form 3540-1) prior to importation. Submit the paper form to the EPA regional office (attention of the Pesticide Import Coordinator) applicable to the intended port of entry

Import of Pesticides and Devices into the USA -- III

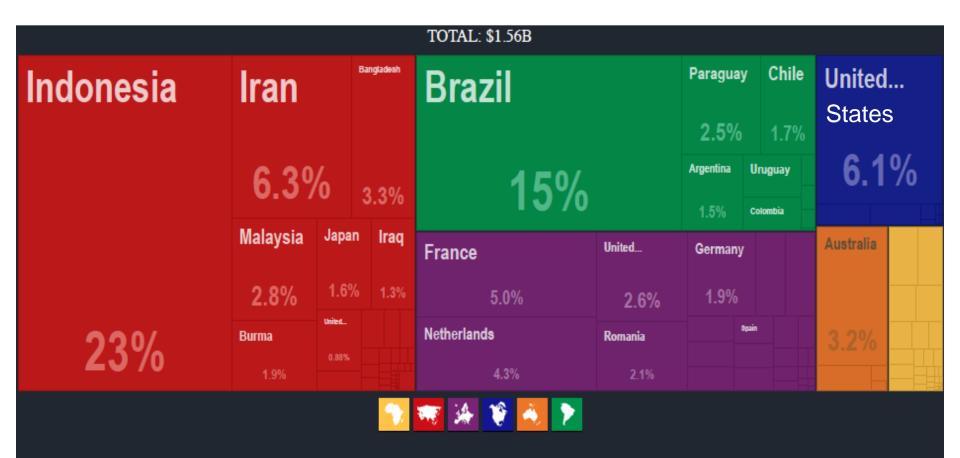
source: https://www.epa.gov/compliance/importing-and-exporting-pesticides-and-devices

U.S. Customs and Border Protection (CBP) regulations prohibit the importation of pesticides without a completed Notice of Arrival (NOA). The NOA indicates the identity and amount of the product, the arrival date, and where the product can be inspected. For paper submissions, the EPA-reviewed and signed paper form is returned to the importer for presentation to CBP's district director at the port of entry. For electronic filings via ACE, most of the filings are automatically processed, and an early indication is provided to the filer if the initial reporting requirements have been met and if the shipment can be released upon arrival at the port of entry. For electronic filings that do not meet the reporting requirements, automatic checks will be performed to notify the filer of errors. For electronic filings that require non-automated checks, EPA staff can review and provide feedback notifications through ACE to the filer on what information is needed that has not been provided. After arrival, EPA may inspect the shipment for compliance with U.S. pesticide laws.

Overview: Share of Countries that import **Phosphatic** Fertilizers



source: https://oec.world/en/profile/hs92/3103/



Overview: Share of Countries that import **Potassic** Fertilizers



source: https://oec.world/en/profile/hs92/3104/

				TOTAL: \$13B				
China	Indonesi	Indonesia Malaysia United States					Netherlands	France
						3.0%	2.2%	2.0%
11%	6.0%	6	2 Q0/	18%		Poland	GBR	
						1.9%	Ireland	
India	Bangladesh	Japar	n ^{inalano}	Brazil		Italy		
IIIuia	South Korea	1.1%	6 1.0%			Norway		
		PHL				South Africa		AUS
8.7%	Vietnam	Turkey		16%		Morocco		
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Overview: Share of Countries that import **Mixed** Mineral or **Chemical** Fertilizers



source: https://oec.world/en/profile/hs92/3105/

TOTAL: \$19.8B														
India		China	Pakistan	Ukraine	Spai	n ^{Fr}	ance	Germany	Brazil		Argentina	PRY	Nigeria	Kenya
				0.00/							2.1%		0.86%	0.82%
8.2%	,)	3.3%	2 1%	3.9%		% 2	.0%	2.0%			Colombia	Eouador		
			J.1 /0		United Kingdom	LTU	Hungary	BGR	100)/	Peru			
Vietnam	Indonesi	ia PHL		1.4% Italy	1.2%	0.91%	0.91%		12 [°]	/0	Chile			
2.7%	2.0%	6 1.0%			Netherlands				United	Canada				
Turkey 2.2%	Japan	BGD		Romania	Estonia	CZE			States		.4%		Austr	alia
Thailand	1.4%	Iran		Belgium-Luxembourg	Denmark	FIN				Mexico	. 7 / 0			
2.1%	Malaysia	South			Ireland				4.5%					



Overview: Share of Countries that import Fertilizers containing **Phosphorus and Potassium**, <=10kg



source: https://oec.world/en/profile/hs92/310560/

			TO	TAL: \$319	M				
France	Ukraine	Belgium- Luxembourg	Spain	Poland	Burma	India	United Stat		Brazil 2.6%
	2 00/	2 00/	0 70/	0 50/			Haiti	Canada	Paraguay
	3.9%	3.9%	3.1%	3.5%			1.1%	0.99%	1.4%
15%	United Kingdom	Sweden	DNK		11%	7.4%	Nexixo 0.80%		COL
Cormany	3.0%	1.9%	Greece				Algeria		
Germany		Baly			Thailand Turkey Ja	pan		Zimbabwe	
=	Netherlands				China Other Asia So		0.95%	Egypt	
7.8%	2.1%	Switzerland			China Other Asia ⁸⁰		Angola		

Overview: Share of Countries that import **Nitrogenous** Fertilizers



source: https://oec.world/en/profile/hs92/3102/

	TOTAL: \$19.5B											
Franc	ē	Germ	nany	United Kingdom	BLX	India	Philippines	Nalaysia	South Korea	Braz	vil	South Africa
Tano	`					India	1.6%	1.1%	1.1%	Dia	411	
						6.8%	Indonesia	Japan				1.5%
5.4%	0	3.4	1%	2.5%	၁ ၁ %	0.070	Thailand				A 0/	
	Poland	•.			2.270	Turkey				1	0%	
Spain	15	25	CZE	DNK		4.3%	Vietnam					
1.9%	Netherla							Mexico		Peru	Argentina Chilo	
Ukraine			Bulgaria			United States		MEXICO		1.7%	1.0% 0.79%	
1.8%	Romania	3	Greece	Lithuania				3.0	%	Colombia	ECU URY	
Italy	ireland			Serbia		11%		Canada		Australia		New Zealand
	reand		Estonia			II /0		2.39				
						S 🐨 🐼	18	>				

Amounts of Fertilizer P_2O_5 (44% phosphorus) purchased by states -- I



State	Fertilizer purchase d in 2003 (1000 kg of P ₂ O ₅)	Fertilizer purchase d in 2005 (1000 kg of P ₂ O ₅)	Fertilizer purchase d in 2007 (1000 kg of P ₂ O ₅)	Fertilizer purchase d in 2009 (1000 kg of P ₂ O ₅)	Fertilizer purchase d in 2011 (1000 kg of P ₂ O ₅)	% change from 2002– 2006 to 2007– 2011*
Alabama	44,090	55,450	52,253	30,683	39,936	-13%
Alaska	733	733	733	594	754	-3%
Arizona	32,319	46,129	28,318	20,071	20,429	-41%
Arkansas	84,605	74,587	78,079	47,873	66,212	-21%
California	207,920	236,867	250,766	102,797	172,683	-31%
Colorado	42,009	43,197	28,845	32,530	29,378	-25%
Connectic ut	3,438	3,592	3,200	2,196	1,642	-35%
Delaware	3,768	3,551	3,409	2,863	3,264	19%

Amounts of Fertilizer P_2O_5 (44% phosphorus) purchased by states -- II



State	Fertilizer purchase d in 2003 (1000 kg of P ₂ O ₅)	Fertilizer purchase d in 2005 (1000 kg of P ₂ O ₅)	Fertilizer purchase d in 2007 (1000 kg of P ₂ O ₅)	Fertilizer purchase d in 2009 (1000 kg of P ₂ O ₅)	Fertilizer purchase d in 2011 (1000 kg of P ₂ O ₅)	% change from 2002– 2006 to 2007– 2011*
Florida	70,104	64,324	60,847	35,746	43,162	-33%
Georgia	111,193	118,646	118,204	19,808	22,781	-65%
Hawaii	4,265	4,265	4,265	3,583	4,344	-3%
Idaho	97,713	93,261	82,568	65,674	85,963	-9%
Illinois	231,367	278,092	310,134	245,310	298,433	-1%
Indiana	181,756	211,126	185,818	149,008	196,903	0%
Iowa	315,952	332,640	338,698	209,164	458,196	8%
Kansas	178,441	188,468	202,775	146,760	180,621	-3%

Amounts of Fertilizer P_2O_5 (44% phosphorus) purchased by states -- III



State	Fertilizer purchased in 2003 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2005 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2007 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2009 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2011 (1000 kg of P ₂ O ₅)	% change from 2002– 2006 to 2007–2011*
Kentucky	89,681	84,179	95,785	56,916	70,386	-20%
Louisiana	45,269	34,797	35,227	24,323	39,165	-5%
Maine	18,270	26,256	32,297	25,967	25,935	19%
Maryland	13,993	15,042	17,622	8,245	18,854	-17%
Massachus etts	4,267	5,222	5,065	3,172	2,744	-28%
Michigan	77,386	74,731	73,583	47,744	50,026	-25%
Minnesota	233,776	270,487	252,859	191,133	299,381	1%
Mississippi	31,027	28,754	35,965	16,570	22,527	-32%

Amounts of Fertilizer P_2O_5 (44% phosphorus) purchased by states -- IV



State	Fertilizer purchased in 2003 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2005 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2007 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2009 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2011 (1000 kg of P ₂ O ₅)	% change from 2002– 2006 to 2007–2011*
Missouri	170,595	174,269	178,888	91,626	173,988	-14%
Montana	60,173	60,008	73,602	65,801	69,681	12%
Nebraska	210,829	247,184	231,818	274,365	289,017	10%
Nevada	7,862	7,190	6,717	5,004	6,531	-13%
New Hampshire	941	1,291	1,624	1,045	1,129	12%
New Jersey	8,470	8,021	8,712	6,105	4,321	-24%
New Mexico	10,596	8,108	13,288	9,548	10,621	-1%
New York	28,970	29,639	29,224	19,074	25,680	-20%

Amounts of Fertilizer P_2O_5 (44% phosphorus) purchased by states -- V



source: https://www.epa.gov/nutrient-policy-data/commercial-fertilizer-purchased

State	Fertilizer purchased in 2003 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2005 (1000 kg of P_2O_5)	Fertilizer purchased in 2007 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2009 (1000 kg of P_2O_5)	Fertilizer purchased in 2011 (1000 kg of P ₂ O ₅)	% change from 2002– 2006 to 2007–2011*
North Carolina	88,149	93,565	98,552	69,780	93,672	-10%
North Dakota	186,109	213,397	237,229	132,064	233,412	10%
Ohio	158,348	164,924	146,000	119,679	98,215	-11%
Oklahoma	90,676	81,970	53,160	38,988	57,418	-32%
Oregon	48,587	63,083	58,862	35,023	40,797	-15%
Pennsylvania	28,723	30,573	31,013	27,459	25,616	-17%
Rhode Island	515	756	826	582	460	-19%
South Carolina	25,164	22,059	24,941	6,258	14,642	-36%

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Amounts of Fertilizer P_2O_5 (44% phosphorus) purchased by states -- VI



State	Fertilizer purchased in 2003 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2005 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2007 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2009 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2011 (1000 kg of P ₂ O ₅)	% change from 2002– 2006 to 2007–2011*
South Dakota	178,039	199,819	195,622	166,166	242,449	3%
Tennessee	69,203	77,120	54,433	45,321	37,060	-40%
Texas	194,437	232,830	189,662	136,028	144,209	-24%
Utah	9,052	14,378	13,093	13,546	9,970	1%
Vermont	2,264	3,095	2,616	2,314	1,846	-10%
Virginia	49,641	43,332	40,368	26,259	28,970	-35%
Washington	50,432	52,630	53,608	38,619	42,026	-7%
West Virginia	2,914	1,259	3,429	847	4,125	45%

Amounts of Fertilizer P_2O_5 (44%) phosphorus) purchased by states -- VII



source: https://www.epa.gov/nutrient-policy-data/commercial-fertilizer-purchased

State	Fertilizer purchased in 2003 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2005 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2007 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2009 (1000 kg of P ₂ O ₅)	Fertilizer purchased in 2011 (1000 kg of P ₂ O ₅)	% change from 2002– 2006 to 2007–2011*
Wisconsin	64,409	68,040	78,748	54,947	80,269	-1%
Wyoming	21,392	22,098	22,399	19,052	27,799	1%

Note - P_2O_5 is 44% phosphorus. By convention, the amount (or analysis grade) of phosphorus in fertilizers is expressed in this oxide form. Additionally, The Association of American Plant Food Control officials have developed a uniform state fertilizer bill which says that available P_2O_5 must be guaranteed by the manufacturer and so the guaranteed analysis of phosphorus must be expressed in the oxide form. * Data are the % change in average amounts of fertilizer P_2O_5 purchased per year during years 2007–2011 vs. years 2002–2006.

Source: Commercial Fertilizers annual data, 2002–2011, maintained by the Association of American Plant Food Control Officials for The Fertilizer Institute





source: https://amcham.jo/economic-relations-profile/

Jordan's Export to the US

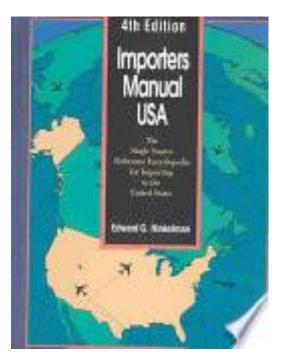
Indicator Export (US\$ Thousand)

Product Group	2011	2012	2013	2014	2015
Raw materials	839.709	2179.945	1392.416	1207.913	2649.017
Chemicals	29740.624	27316.228	22022.104	21308.221	28642.017
Minerals	22.734	58.42	1.893	168.279	38.901

As there is already Jordanian export to the USA in the mentioned categories above, it is recommended also to understand from these Jordanian exporters to the US what the law and regulations (for fertilizers) are, in addition to general "dos and don'ts".

Book Recommendation for further details





Importers Manual USA: The Single Source Reference Encyclopedia for Importing to the United States By Edward G. Hinkelman, Myron Manley, Karla C. Shippey, James L. Nolan, Wendy Bidwell, Alexandra Woznick

EPA Compliance Guide for the Chemical Import Requirements of the Toxic Substances Control Act



source: https://www.epa.gov/sites/production/files/2013-09/documents/importguidejune2008.pdf

EPA 305-B-08-001 June 2008

Office of Enforcement and Compliance Assurance

SEPA

Compliance Guide For the Chemical Import Requirements of the Toxic Substances Control Act



In case there are also Toxic Substances included, the download of this guide is indispensable.

Additional sources: https://www.epa.gov/sites/production/files/2016-04/documents/20150721fs.pdf

https://www.epa.gov/sites/production/files/2017-09/documents/phosphates_reconsideration_final_fact_sheet. pdf

https://www.epa.gov/sites/production/files/2017-09/documents/frn_phosphate_reconsideration_final_rules.pd f

https://www.epa.gov/pesticide-registration/label-reviewmanual Additional Sources – I : Fertilizer - 2018 State of the Fertilizer Industry



source: https://www.tfi.org/sites/default/files/tfi-stateoftheindustry-2018.pdf



Interesting overview brochure, esp. focusing on environmental issues:

https://www.tfi.org/sites/def ault/files/tfistateoftheindustry-2018.pdf

Additional Sources -- II



• General Export Guide of the UK:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attac hment_data/file/301343/Establishing_a_Business_Presence_in_the_USA.pdf

Additional Sources -- III



visit: https://amcham.jo/

For further and more detailed investigation in this issue, it is recommended to contact **AmCham in Amman** as they should be able to provide additional information and sources too.

Fertilizers