

Mineral Industry Surveys

For information, contact:

Désirée E. Polyak, Vanadium Commodity Specialist
National Minerals Information Center
Telephone: (703) 648-4909
Email: dpolyak@usgs.gov

Michelle B. Blackwell (Data)
Telephone: (703) 648-7943
Email: mblackwell@usgs.gov

Internet: <https://www.usgs.gov/centers/national-minerals-information-center/mineral-industry-surveys>

VANADIUM IN MAY 2025

The amount of vanadium in U.S. imports of select vanadium products on a gross weight basis in May 2025, excluding vanadium bearing ash and residues, was 25% less than that in April 2025 and 25% less than that in May 2024 (table 1).

In May 2025, the import sources for vanadium pentoxide (V_2O_5) were Brazil and South Africa. In May 2025, the import sources for ferrovanadium (FeV) were Canada, India, and Japan, in descending order of gross weight quantity (table 2).

prices in China, 98% V_2O_5 content, averaged \$5.000 per pound of contained vanadium in May 2025 compared with \$5.043 per pound of contained vanadium in April 2025 (fig. 1).

Industry News

Tyfast Energy Corp. (San Diego, CA) and US Vanadium LLC (Pittsburgh, PA) launched a joint collaboration that will refine vanadium oxide powders sourced from post-industrial waste at US Vanadium's facility in Hot Springs, AR, for use in Tyfast's lithium vanadium oxide (LVO) anode used for high-performance lithium-ion batteries. Tyfast's LVO anodes were designed to have faster charging speeds, more charge and discharge cycles, perform at lower temperatures, and be safer than traditional graphite-based anodes. Tyfast planned to make batteries for use by heavy duty vehicles used for construction, military, mining, and trucking uses (US Vanadium LLC, 2025).

Reference Cited

US Vanadium LLC, 2025, Tyfast and US Vanadium sign an MOU to industrially scale a new class of metal oxide anode to power batteries in heavy duty vehicles: Hot Springs, AR, May 27. (Accessed July 15, 2025, at <https://usvanadium.com/tyfast-and-us-vanadium-sign-an-mou-to-industrially-scale-a-new-class-of-metal-oxide-anode-to-power-batteries-in-heavy-duty-vehicles/>.)

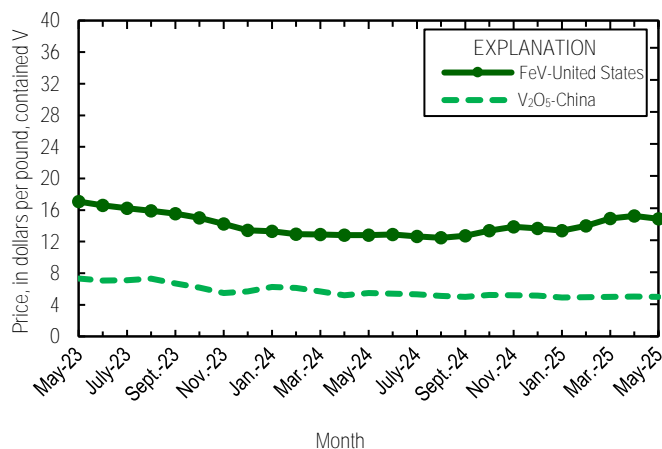


Figure 1. Average monthly prices for ferrovanadium (FeV) in the United States and vanadium pentoxide (V_2O_5) in China from May 2023 through May 2025. Source: Argus Media, Argus Non-Ferrous Markets.

Prices

According to Argus Media group, Argus Non-Ferrous Markets, the monthly U.S. FeV price, 78–82% vanadium content, averaged \$14.900 per pound of contained vanadium in May 2025 compared with \$15.250 per pound of contained vanadium in April 2025. Monthly FeV prices in Europe, 78–82% vanadium content, averaged \$24.233 per kilogram of contained vanadium in May 2025 compared with \$24.133 per kilogram of contained vanadium in April 2025. Monthly V_2O_5

A worksheet has been added to the Excel table files that includes a button to remove text and numerical footnotes from data cells. This will allow users to only have numbers in data cells. Please see the worksheet titled RemoveTextButton for instructions in how to use the tool. Note: you must download the excel file to use the tool.

List services and web feed subscribers are the first to receive notification of USGS minerals information publications and data releases. For information on how to subscribe, go to <https://www.usgs.gov/centers/national-minerals-information-center/minerals-information-publication-list-services>.

Table 1. U.S. imports for consumption of vanadium products.

[Data are rounded to no more than three significant digits; may not add to totals shown. Data are in kilograms, unless otherwise specified. NA, not available, —, not applicable. Source: U.S. Census Bureau (<https://usatrade.census.gov/>).]

		2025								
Material	HTS ¹ codes	April			May			January–May		
		Gross weight	Vanadium content	Value (thousand dollars)	Gross weight	Vanadium content	Value (thousand dollars)	Gross weight	Vanadium content	Value (thousand dollars)
Vanadium ores and concentrates	2615.90.6090	249	149 ²	19,800	912	353 ²	72,600	210,000	88,800 ²	985,000
Vanadium bearing ash and residues ³	2620.40.0030, 2620.99.1000	NA	NA	58,400	NA	NA	51,600	NA	NA	1,200,000
Total	—	—	—	78,300	—	—	124,000	—	—	2,180,000
Ferrovandium	7202.92.0000	283,000	226,000	11,300,000	216,000	159,000	5,310,000	1,280,000	986,000	39,200,000
Vanadium metal, including waste and scrap	8112.92.7000	6,690	6,640	462,000	0	0	0	7,810	7,710	724,000
Vanadium and articles thereof ⁴	8112.99.2000	36	36	9,630	5	4	12,800	8,130	5,390	196,000
Total	—	289,000	233,000	11,800,000	216,000	159,000	5,320,000	1,290,000	999,000	40,100,000
Chemical compounds										
Vanadium pentoxide (anhydride)	2825.30.0010	263,000	155,000	3,880,000	240,000	161,000	3,540,000	1,020,000	710,000	15,100,000
Vanadium oxides and hydroxides, other	2825.30.0050	100,000	64,900	1,550,000	0	0	0	170,000	111,000	2,750,000
Vanadium chlorides	2827.39.1000	1,260	1,260	32,500	15	14	7,800	2,780	2,700	83,500
Vanadium chloride oxide and chloride hydroxide	2827.49.1000	18,400	18,400	223,000	0	0	0	73,400	73,400	905,000
Vanadium sulfates	2833.29.3000	2,650	1,770	17,700	0	0	0	36,800	35,200	121,000
Vanadates	2841.90.1000	6,000	600	133,000	0	0	0	6,000	600	133,000
Hydrides and nitrides of vanadium	2850.00.2000	8,090	7,660	227,000	59,200	47,100	298,000	110,000	89,200	1,060,000
Total	—	399,000	250,000	6,060,000	299,000	208,000	3,850,000	1,420,000	1,020,000	20,200,000

¹Harmonized Tariff Schedule codes of the United States.

²Data are in kilograms of vanadium pentoxide.

³U.S. Census Bureau has suppressed quantity data for some months; not included in “Total”.

⁴Aluminum-vanadium master alloy consisting of 35% aluminum and 64.5% vanadium.

Table 2. U.S. imports and exports of ferrovanadium, other oxides and hydroxides of vanadium, vanadium ores and concentrates, and vanadium pentoxide (anhydride).

[Data are rounded to no more than three significant digits; may not add to totals shown. Presentation of monthly data is based on the quantities (gross weight or contained weight) of the five leading countries or localities in May. Data are in kilograms, gross and contained weight. Revised data are marked with a superscript "r". NA, not available, —, not applicable. Source: U.S. Census Bureau (<https://usatrade.census.gov/>).]

2025							
Country or locality	HTS ¹ codes and Schedule B numbers	April		May		January–May	
		Gross weight	Vanadium content	Gross weight	Vanadium content	Gross weight	Vanadium content
Imports for consumption							
Vanadium ores and concentrates							
Mexico		249	149 ²	912	353 ²	60,300	36,000 ²
Other [2 country and (or) locality]	2615.90.6090	0	0	0	0	149,000	52,800 ²
Total		249	149 ²	912	353 ²	210,000	88,800 ²
Vanadium pentoxide (anhydride) ³							
Austria		2,650	1,510	0	0	2,660	1,520
Brazil		40,500	31,900	120,000	94,100	452,000	387,000
South Africa	2825.30.0010	220,000	122,000	120,000	66,900	540,000	300,000
Other [3 country and (or) locality]		0	0	0	0	25,600	20,900
Total		263,000	155,000	240,000	161,000	1,020,000	710,000
Other oxides and hydroxides of vanadium							
Brazil		100,000	64,900	0	0	150,000	97,400
Other [2 countries and (or) localities]	2825.30.0050	0	0	0	0	20,000	13,300
Total		100,000	64,900	0	0	170,000	111,000
Ferrovanadium							
Austria		110,000	87,400	0	0	238,000	177,000
Canada		131,000	105,000	149,000	105,000	853,000	660,000
India	7202.92.0000	20,000	15,600	47,000	37,900	107,000	85,200
Japan		22,000	17,600	20,000	16,400	62,000	50,400
Other [3 countries and (or) localities]		136	109	0	0	15,600	12,800
Total		283,000	226,000	216,000	159,000	1,280,000	986,000
Exports							
Vanadium ores and concentrates							
Canada		4,580	NA	1,870	NA	6,480	NA
Other [2 country and (or) locality]	2615.90.6090	222 ^r	NA	0	NA	4,770	NA
Total		4,800	—	1,870	—	11,200	—
Vanadium pentoxide (anhydride) ³							
Belgium		NA	13,500	NA	27,000	NA	54,000
India	2825.30.0010	NA	300	NA	10,300	NA	14,800
Other [1 country and (or) locality]		NA	22 ^r	0	0	NA	5,020
Total		—	13,800	—	37,300	—	73,800
Other oxides and hydroxides of vanadium							
Canada	2825.30.0050	NA	34,800	NA	21,100	NA	178,000
Korea, Republic of		0	0	NA	702	NA	702
Other [1 country and (or) locality]		NA	500	0	0	NA	500
Total		—	35,300	—	21,800	—	179,000
Ferrovanadium							
France		218	164	0	0	218	164
Mexico	7202.92.0000	68	51	0	0	136	102
Other [1 country and (or) locality]		0	0	0	0	1,980	1,480
Total		286	215	0	0	2,330	1,750

¹Harmonized Tariff Schedule codes of the United States are imports and Schedule B numbers of the United States are exports.

²Data are in kilograms of vanadium pentoxide.

³May include catalysts containing vanadium pentoxide.

Table 3. U.S imports and exports of aluminum vanadium master alloy, vanadium bearing ash and residues, vanadium sulfates, vanadates, vanadium metal, and U.S. imports of slag.

[Data are rounded to no more than three significant digits; may not add to totals shown. Presentation of monthly data is based on the quantities (gross weight or contained weight) of the leading countries and (or) localities in May. Data are in kilograms, gross and contained weight. Revised data are marked with a superscript "r". NA, not available, —, not applicable. Source: U.S. Census Bureau (<https://usatrade.census.gov/>).]

2025							
Country or locality	HTS ¹ codes and Schedule B numbers	April		May		January–May	
		Gross weight	Vanadium content	Gross weight	Vanadium content	Gross weight	Vanadium content
Imports for consumption							
Slag, from the manufacture of iron and steel							
Canada		42,900,000	NA	1,970,000	NA	47,800,000	NA
India		0	NA	17,800	NA	17,800	NA
Mexico	2619.00.9000	16,500	NA	36,600	NA	550,000	NA
Other [2 country and (or) locality]		221 ^r	NA	0	NA	4,340	NA
Total		43,000,000	—	2,030,000	—	48,400,000	—
Vanadium bearing ash and residues							
Total	2620.40.0030, 2620.99.1000	0	0	0	0	0	0
Vanadium sulfates							
Australia		0	0	0	0	34,000	33,300
China	2833.29.3000	2,650	1,770	0	0	2,800	1,860
Total		2,650	1,770	0	0	36,800	35,200
Vanadates							
Germany	2841.90.1000	6,000	600	0	0	6,000	600
Vanadium metal, including waste and scrap and aluminum-vanadium master alloy							
Austria		5,730	5,720	0	0	5,730	5,720
Canada		659	659	0	0	1,770	1,730
China		0	0	5	4	8,020	5,280
Germany	8112.92.7000, 8112.99.2000	304	256	0	0	304	256
Mexico		36	36	0	0	124	124
Total		6,730	6,670	5	4	15,900	13,100
Exports							
Vanadium bearing ash and residues							
Germany		0	0	39,200	NA	56,600	NA
Korea, Republic of		31,300	NA	0	0	31,300	NA
Other [3 countries and (or) localities]	2620.50.0000, 2620.99.1000	0	0	0	0	240,000	NA
Total		31,300	—	39,200	—	328,000	—
Hydrides and nitrides of vanadium							
China		6,000	6,000	0	0	9,250	8,570
Germany		2,080	1,650	50,700	40,400	61,600	49,900
Ireland		7	6	7	7	15	14
South Africa	2850.00.2000	3	3	3,410	2,690	29,100	23,000
Sweden		0	0	4,600	3,630	9,250	7,310
United Kingdom		0	0	409	409	409	409
Total		8,090	7,660	59,200	47,100	110,000	89,200
Vanadium metal, including waste and scrap and aluminum-vanadium master alloy							
China		0	0	7,830	NA	7,830	NA
Romania		177	NA	225	NA	496	NA
United Kingdom	8112.92.7000, 8112.99.2000	0	0	9,660	NA	9,840	NA
Other [4 countries and (or) localities]		1,930 ^r	NA	0	0	2,540	NA
Total		2,110	—	17,700	—	20,700	—

¹Harmonized Tariff Schedule codes of the United States are imports and Schedule B numbers of the United States are exports.