

# Mineral Industry Surveys

**For information, contact:**

Lisa A. Corathers, Manganese Commodity Specialist  
 National Minerals Information Center  
 U.S. Geological Survey  
 989 National Center  
 Reston, VA 20192  
 Telephone: (703) 648-4973, Fax: (703) 648-7757  
 Email: lcorathers@usgs.gov

Hodan A. Fatah (Data)  
 Telephone: (703) 648-4971  
 Fax: (703) 648-7975  
 Email: hfatah@usgs.gov

**Internet:** <https://www.usgs.gov/centers/nmic>

## MANGANESE IN APRIL 2019

On a gross-weight basis, U.S. imports of manganese ore in April 2019 decreased to 38,700 metric tons (t) from 48,800 t in March 2019 (fig. 1, table 5). Imports for the year through April totaled 127,000 t, slightly less compared with imports in the same period in 2018.

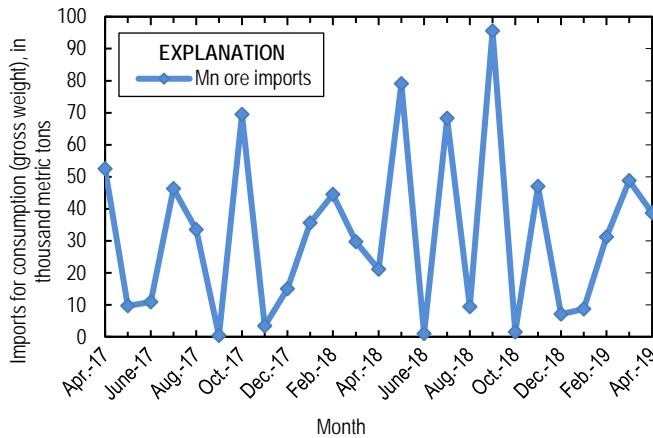


Figure 1. Monthly imports of manganese (Mn) ore from April 2017 through April 2019. Source: U.S. Census Bureau.

In April 2019, the average spot prices for manganese ore deliveries to China were \$6.14 per metric ton unit, 36%–39% grade, and \$6.48 per metric ton unit, 44% grade (fig. 2, table 1). Compared with March 2019 prices, the 36%–39%-grade price was essentially unchanged and the 44%-grade price was unchanged. Compared with the monthly average prices in April

2018, the 36%–39%-grade price was 21% less and the 44%-grade price was 20% less.

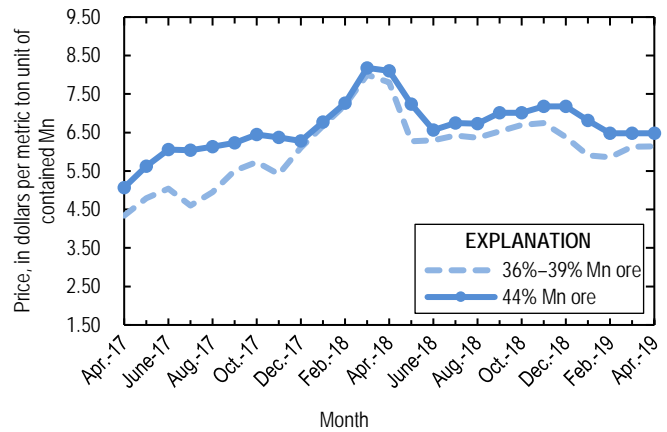


Figure 2. Average monthly spot prices for manganese (Mn) ore delivered to China from April 2017 through April 2019. Source: CRU Group.

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/nmic/minerals-information-publication-list-services>.

TABLE 1  
 PRICES FOR MANGANESE FERROALLOYS, METAL, AND ORE IN APRIL 2019

		Low	Average	High
<b>Manganese ferroalloys:<sup>1</sup></b>				
High-carbon ferromanganese, 75% manganese	dollars per long ton of contained manganese	1,350.00	1,375.00	1,400.00
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	112.00	113.00	114.00
Silicomanganese, 65% manganese	do.	65.00	66.00	67.00
Manganese metal, 99.7% manganese flake <sup>2</sup>	cents per pound	119.00	127.33	135.00
<b>Manganese ore:<sup>3, 4</sup></b>				
36%–39% manganese	dollars per metric ton unit contained manganese	6.05	6.14	6.25
44% manganese	do.	6.45	6.48	6.50

do. Ditto.

<sup>1</sup>Platts Metals Week; in U.S. warehouse; average prices reported for all transactions during the month.

<sup>2</sup>CRU Ryan's Notes North American transaction prices, electrolytic manganese metal flake, 99.7% manganese, ex-works; average prices reported for the price range.

<sup>3</sup>CRU Ryan's Notes, cost and freight, China; average prices reported for the price range.

<sup>4</sup>To determine dollars per metric ton of ore (gross weight), multiply the manganese content percentage by the price; that is, by 44 when the manganese content is 44%.

TABLE 2  
SELECTED U.S. FOREIGN TRADE IN MANGANESE<sup>1</sup>

(Metric tons, manganese content)<sup>2</sup>

	Imports for consumption			Exports		
	Ore and dioxide	Ferroalloy and metal	Total	Ore	Ferroalloy and metal	Total
2018:						
April	10,500	41,700	52,200	16	1,250	1,270
January–April	61,600	204,000 <sup>r</sup>	265,000 <sup>r</sup>	106	3,270	3,370
2019:						
January	4,670	27,000	31,600	19	1,690	1,710
February	12,300	66,700	79,100	94	1,840	1,930
March	25,600	55,700	81,300	45	1,330	1,370
April	27,000	46,300	73,400	20	1,140	1,160
January–April	69,600	196,000	265,000	178	5,990	6,170

<sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

Source: U.S. Census Bureau.

TABLE 3  
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN APRIL 2019<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>3</sup>	January–April <sup>2</sup>		
				Gross weight	Mn content	Customs value <sup>3</sup>
Australia	--	--	--	19,900	13,200	\$24,900,000
Georgia	1,350	979	\$1,540,000	28,300	21,000	35,800,000
Malaysia	1,430	940	1,470,000	6,510	4,250	6,930,000
Mexico	2,560	1,670	2,930,000	6,900	4,490	7,950,000
Norway	5,100	3,360	6,070,000	19,600	13,200	22,500,000
Russia	--	--	--	1	1	2,720
South Africa	15,600	10,100	17,200,000	36,400	23,600	40,000,000
Spain	411	248	585,000	3,410	2,220	3,930,000
Total	26,400	17,300	29,700,000	121,000	82,000	142,000,000

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>May include revised data that are not broken out by specific month(s).

<sup>3</sup>Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

Source: U.S. Census Bureau.

TABLE 4  
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN APRIL 2019<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>3</sup>	January–April <sup>2</sup>		
				Gross weight	Mn content	Customs value <sup>3</sup>
<b>Low carbon:</b>						
China	--	--	--	320	304	\$591,000
Germany	23	22	\$59,300	145	132	356,000
Japan	97	76	167,000	385	305	660,000
Korea, Republic of	799	735	1,780,000	2,600	2,330	5,740,000
Mexico	236	187	468,000	1,670	1,320	3,000,000
Norway	6,250	5,070	10,600,000	19,400	15,700	32,800,000
South Africa	52	45	87,900	158	138	266,000
Spain	575	461	952,000	2,760	2,220	4,610,000
<b>Total</b>	<b>8,040</b>	<b>6,600</b>	<b>14,200,000</b>	<b>27,400</b>	<b>22,400</b>	<b>48,100,000</b>
<b>Medium carbon, 1%–2% C:</b>						
China	--	--	--	21	16	28,000
India	--	--	--	103	82	164,000
Korea, Republic of	3,650	2,920	5,850,000	7,850	6,280	12,500,000
Malaysia	--	--	--	21	16	30,700
Mexico	428	331	656,000	2,070	1,610	3,300,000
Norway	1,200	980	1,860,000	5,500	4,470	8,310,000
South Africa	5,110	4,080	8,850,000	8,950	7,140	15,500,000
<b>Total</b>	<b>10,400</b>	<b>8,320</b>	<b>17,200,000</b>	<b>24,500</b>	<b>19,600</b>	<b>39,900,000</b>
<b>High carbon:</b>						
Australia	--	--	--	26,100	19,900	28,600,000
Brazil	199	139	202,000	510	362	557,000
Korea, Republic of	400	320	662,000	1,600	1,230	1,940,000
Malaysia	117	84	203,000	15,700	11,900	15,600,000
Mexico	3	2	4,760	5	4	9,530
Russia	5,500	4,170	5,000,000	10,700	8,160	9,610,000
Saudi Arabia	--	--	--	60	44	98,200
South Africa	5,900	4,470	6,640,000	10,200	7,740	11,800,000
Ukraine	613	467	530,000	4,040	3,070	3,530,000
<b>Total</b>	<b>12,700</b>	<b>9,650</b>	<b>13,200,000</b>	<b>68,900</b>	<b>52,400</b>	<b>71,800,000</b>
<b>Grand total</b>	<b>31,200</b>	<b>24,600</b>	<b>44,600,000</b>	<b>121,000</b>	<b>94,400</b>	<b>160,000,000</b>

-- Zero.

<sup>1</sup>Data rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>May include revised data that are not broken out by specific month(s).

<sup>3</sup>Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance and other charges incurred in bringing the material into the United States.

Source: U.S. Census Bureau.

TABLE 5  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn)  
IN APRIL 2019<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>3</sup>	January–April <sup>2</sup>		
				Gross weight	Mn content	Customs value <sup>3</sup>
More than 20%, but less than 47% manganese, South Africa	135	56	\$39,900	25,000	9,020	\$4,750,000
47% or more manganese:						
Brazil	106	52	70,700	264	129	177,000
Gabon	38,400	26,700	11,100,000	102,000	59,400	31,600,000
Morocco	--	--	--	39	22	50,900
South Africa	17	8	4,080	217	105	91,900
Turkey	--	--	--	4	3	2,380
Total	38,500	26,700	11,200,000	102,000	59,700	31,900,000
Grand total	38,700	26,800	11,200,000	127,000	68,700	36,600,000

-- Zero.

<sup>1</sup>Data rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>May include revised data that are not broken out by specific month(s).

<sup>3</sup>Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

Source: U.S. Census Bureau.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE  
IN APRIL 2019<sup>1</sup>

(Metric tons, gross weight)

Source	Quantity	Customs value <sup>3</sup>	January–April <sup>2</sup>	
			Quantity	Customs value <sup>3</sup>
Brazil	--	--	66	\$112,000
China	11	\$18,200	36	82,200
Germany	5	28,800	17	91,500
India	--	--	17	30,100
Japan	432	976,000	1,310	2,900,000
Slovakia	--	--	13	22,500
Total	448	1,020,000	1,460	3,240,000

-- Zero.

<sup>1</sup>Data rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>May include revised data that are not broken out by specific month(s).

<sup>3</sup>Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

Source: U.S. Census Bureau.

TABLE 7  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL  
IN APRIL 2019<sup>1</sup>

(Metric tons)

Source	Gross weight	Customs value <sup>3</sup>	January–April <sup>2</sup>	
			Gross weight	Customs value <sup>3</sup>
<b>Unwrought flake:</b>				
China	115	\$224,000	4,350	\$8,660,000
Gabon	--	--	50	122,000
Japan	(4)	189,000	1	856,000
Mexico	--	--	1	2,890
South Africa	561	1,380,000	1,670	4,540,000
Total	676	1,790,000	6,080	14,200,000
<b>Unwrought powder:</b>				
China	--	--	40	85,200
Mexico	34	131,000	58	224,000
South Africa	60	185,000	664	1,870,000
Total	94	316,000	761	2,180,000
<b>Unwrought, other:</b>				
China	3,030	5,990,000	10,500	21,500,000
Germany	294	719,000	1,130	2,690,000
Poland	--	--	(4)	6,310
South Africa	143	377,000	469	1,200,000
Spain	47	79,900	109	187,000
Total	3,520	7,170,000	12,200	25,600,000
<b>Other manganese, wrought:</b>				
China	--	--	(4)	27,300
Germany	28	343,000	141	1,690,000
Japan	--	--	(4)	11,800
Mexico	99	271,000	121	369,000
Sweden	--	--	2	23,300
United Kingdom	(4)	2,090	(4)	2,090
Total	127	616,000	264	2,120,000
Metallic waste and scrap, Canada	35	12,100	71	24,400
Grand total	4,450	9,910,000	19,300	44,100,000

-- Zero.

<sup>1</sup>Data rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>May include revised data that are not broken out by specific month(s).

<sup>3</sup>Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

<sup>4</sup>Less than ½ unit.

Source: U.S. Census Bureau.



TABLE 8  
U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE,  
SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OR LOCALITY OF DESTINATION  
IN APRIL 2019<sup>1, 2</sup>

Source	Gross weight (metric tons)	F.a.s. <sup>4</sup> value (thousands)	January–April <sup>3</sup>	
			Gross weight (metric tons)	F.a.s. <sup>4</sup> value (thousands)
<b>Ore and concentrates with 20% or more manganese:</b>				
Bahamas	--	--	6	\$6
Canada	19	\$18	70	66
Mexico	7	7	14	13
Netherlands	--	--	192	354
Singapore	14	13	73	120
Total	39	38	355	559
<b>Ferromanganese:</b>				
2% or less carbon:				
Canada	--	--	1,040	1,850
Chile	--	--	9	17
China	--	--	24	47
United Kingdom	25	47	25	47
Total	25	47	1,100	1,970
More than 2% carbon:				
Canada	589	690	3,430	4,390
United Kingdom	24	68	26	73
Total	614	758	3,460	4,470
<b>Silicomanganese:</b>				
Canada	40	47	79	99
Mexico	4	9	4	9
Total	44	56	83	108
<b>Metal, including alloys and waste and scrap:<sup>5</sup></b>				
Canada	9	49	17	100
China	--	--	1	12
Costa Rica	(6)	5	(6)	15
Germany	--	--	(6)	5
Guatemala	--	--	2	19
India	--	--	39	17
Jamaica	--	--	3	13
Japan	20	72	39	145
Malaysia	556	179	1,970	795
Mexico	3	14	34	277
New Zealand	--	--	(6)	5
Norway	17	67	17	67
Pakistan	--	--	220	68
Peru	2	14	2	14
Total	607	400	2,340	1,550
Grand total	1,330	1,300	7,330	8,650

-- Zero.

<sup>1</sup>Presentation of monthly data is based on the "January–April" quantities of the leading countries.

<sup>2</sup>Data rounded to no more than three significant digits; may not add to totals shown.

<sup>3</sup>May include revised data that are not broken out by specific month(s).

<sup>4</sup>Free alongside ship.

<sup>5</sup>Includes manganese-aluminum, other alloys, and waste and scrap.

<sup>6</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 9  
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS  
IN APRIL 2019, BY CLASS<sup>1</sup>

Class	Gross weight (metric tons)	Value <sup>2</sup> (thousands)	Principal sources and destinations: gross weight (metric tons); value <sup>2</sup> (thousands)	January–April <sup>2</sup>		
				Gross weight (metric tons)	Value <sup>2</sup> (thousands)	Principal sources and destinations: gross weight (metric tons); value <sup>2</sup> (thousands)
<b>Imports for consumption:</b>						
Manganese oxides other than dioxide	957	\$724	Peru 231; \$88	6,480	\$4,380	South Africa 2,910; \$1,560
Manganites, manganates, and other permanganates	--	--	--	19	44	China 19; \$44
Potassium permanganate	107	265	India 107; \$265	292	758	India 286; \$739
Sodium permanganate	80	183	China 80; \$183	282	642	China 282; \$642
Sulfates, basket category, including manganese sulfate	4,320	3,870	Mexico 1,820; \$1,350	17,700	15,700	Mexico 7,720; \$5,410
<b>Exports:</b>						
Manganese dioxide	394	935	Canada 166; \$194	2,050	3,590	Canada 1,090; \$1,100
Manganese oxides other than dioxide	821	1,730	Belgium 153; \$300	1,910	3,570	Belgium 311; \$605
Manganites, manganates, and other permanganates	26	56	Canada 26; \$52	56	164	Canada 36; \$72
Potassium permanganate	412	1,160	Belgium 252; \$620	1,430	3,940	Belgium 631; \$1,540
Sodium permanganate	95	207	Belgium 76; \$165	241	586	Belgium 171; \$372
Sulfates, basket category, including manganese sulfate	2,090	2,940	Canada 1,620; \$907	6,550	10,900	Canada 4,780; \$3,760

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits.

<sup>2</sup>For imports, customs value; for exports, free alongside ship value.

Source: U.S. Census Bureau.