

Mineral Industry Surveys

For information, contact:

Désirée E. Polyak, Molybdenum Commodity Specialist

National Minerals Information Center

Telephone: (703) 648-4909 Email: dpolyak@usgs.gov Mana Saedi (Data)

Telephone: (703) 648-7982 Email: msaedi@usgs.gov

Internet: https://www.usgs.gov/centers/national-minerals-

information-center/mineral-industry-surveys

MOLYBDENUM IN APRIL 2023

Domestic production of molybdenum in concentrate in April 2023 was 4% less than the output in the previous month and 8% more than the output in April 2022 (fig. 1, table 1).

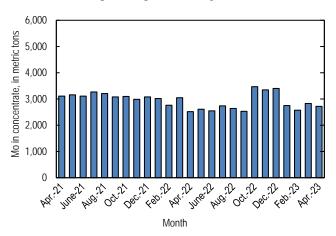


Figure 1. Monthly domestic production of molybdenum (Mo) in concentrate from April 2021 through April 2023 (may include revisions to previously published data).

Prices

According to CRU Group, the monthly average price range for U.S. ferromolybdenum (FeMo) was \$27.469 to \$29.031 per pound of molybdenum content in April 2023 compared with \$39.444 to \$40.333 per pound of molybdenum content in March 2023. FeMo monthly average prices in Europe ranged from \$51.500 to \$54.500 per kilogram (\$23.360 to \$24.721 per pound) of molybdenum content in April 2023 compared with \$77.556 to \$80.667 per kilogram (\$35.179 to \$36.590 per pound) in March 2023. U.S. molybdic oxide (MoO₃) prices ranged from \$27.063 to \$27.750 per pound of molybdenum content in April 2023 compared with the range from \$33.500 to \$34.444 per pound of molybdenum content in March 2023 (fig. 2).

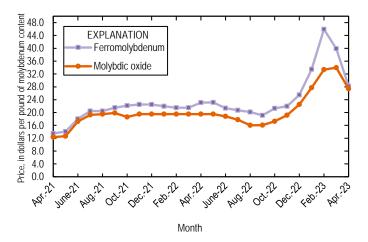


Figure 2. Average monthly prices for U.S. ferromolybdenum and molybdic oxide from April 2021 through April 2023. Source: CRU Group.

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/national-minerals-information-center/minerals-information-publication-list-services.

TABLE 1 $\mbox{U.s. SALIENT MOLYBDENUM CONCENTRATE } \\ \mbox{STATISTICS}^{1,2}$

(Metric tons, contained molybdenum)

Period	Production	Shipments ^{3, 4}		
2022:				
January	3,020	3,100		
February	2,760	2,760		
March	3,050	3,080		
April	2,520	2,540		
May	2,610	2,620		
June	2,550	2,530		
July	2,740	2,700		
August	2,640	2,680		
September	2,530	2,550		
October	3,470	3,390		
November	3,350	3,360		
December	3,400	3,350		
January-December	34,600	34,700		
2023:				
January	2,750	2,610		
February	2,570	2,570 ^r		
March	2,830	2,900 ^r		
April	2,720	2,710		
January–April	10,900	10,800		

rRevised.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²Includes annual or quarterly published data from Freeport-McMoran Inc. (2022–2023) that has been adjusted by USGS to reflect estimated monthly data.

³As reported by producers.

⁴Shipments include sales to domestic customers, sales for export, and transfers to other company plants.

 $\label{eq:table 2} TABLE~2$ U.S. EXPORTS OF MOLYBDENUM ORES AND CONCENTRATES (including roasted concentrate), BY COUNTRY OR LOCALITY 1

(Kilograms, contained molybdenum)

		2022		2023			
	January-	January–				January–	
Country or locality	December	April	April	March	April	April	
Argentina	87,000	10,800	75,700				
Belgium	2,130,000 r	190,000	1,030,000 ^r	8,950		109,000	
Brazil	229,000	8,610	64,200	61,600	48,800	123,000	
Cambodia	5,000	1,600	1,600				
Canada	408,000	48,400	182,000	67,200	112,000	433,000	
Chile	98,400		98,400	142,000	139,000	422,000	
China	402,000 ^r			98,500	18,000	197,000	
Germany	5,700		5,700				
Hong Kong	1,680	1,680	1,680				
India	499,000 ^r		180,000 ^r	23,900	24,100	108,000	
Italy	114						
Japan	3,460,000 ^r	319,000 ^r	1,100,000	449,000	260,000	1,240,000	
Korea, Republic of	681,000	37,400	148,000	57,000		287,000	
Latvia	1,140						
Mexico	1,970,000	80,900	795,000			92,900	
Netherlands	28,300,000 ^r	2,100,000	8,770,000 ^r	2,860,000	3,140,000	10,700,000	
South Africa	11,800						
Taiwan	3,400						
Thailand	12,400				2,170	14,900	
United Kingdom	6,740,000	653,000 ^r	2,600,000	1,160,000	577,000	2,850,000	
Vietnam	1,130,000	65,900	235,000 ^r	20,100	33,700	210,000	
Total	46,200,000 r	3,520,000 ^r	15,300,000 ^r	4,940,000	4,360,000	16,800,000	

Revised. -- Zero.

Source: U.S. Census Bureau.

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

 $\label{eq:table 3} \textbf{U.S. EXPORTS OF FERROMOLYBDENUM, BY COUNTRY OR LOCALITY}^1$

(Kilograms, contained molybdenum)

-		2022		2023			
	January–	January-				January-	
Country or locality	December	April	April	March	April	April	
Argentina	547						
Australia	2,560		1,700	1,060		1,060	
Canada	93,400 ^r	7,790	48,100	30,900	43,700	82,200	
Denmark	880		440	583		583	
India						17,700	
Mexico	92,600	10,200	11,500	43,500	30,000	73,500	
Total	190,000 ^r	18,000	61,700	76,000	73,700	175,000	

^rRevised. -- Zero.

Source: U.S. Census Bureau.

 $^{^{1}\}mbox{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

 $\label{eq:table 4} \textbf{U.S. IMPORTS FOR CONSUMPTION OF MOLYBDENUM PRODUCTS}^1$

(Kilograms, unless otherwise specified)

	2022 January–December			2023					
				April			January–April		
	Gross	Contained	Value ²	Gross	Contained	Value ²	Gross	Contained	Value ²
Material	weight	molybdenum	(thousands)	weight	molybdenum	(thousands)	weight	molybdenum	(thousands)
Ore and concentrates, roasted	3,240,000	2,000,000	\$74,600	263,000	164,000	\$9,230	892,000	557,000	\$35,300
Ore and concentrates, other	28,800,000	13,700,000	511,000	4,940,000	2,490,000	149,000	12,500,000	6,150,000	340,000
Molybdenum chemicals:									
Oxides and hydroxides	3,660,000	NA	106,000	500,000	NA	23,700	2,080,000	NA	90,500
Molybdates of ammonium	1,360,000	773,000	33,700	219,000	124,000	8,590	667,000	376,000	24,200
Molybdates (all others)	360,000	144,000	5,980	22,000	8,680	653	112,000	44,200	2,320
Molybdenum orange	174,000 ^r	NA	1,260 ^r	40,600	NA	258	109,000	NA	575
Ferromolybdenum	10,600,000	7,260,000	311,000	1,440,000	990,000	62,100	3,770,000	2,610,000	147,000
Molybdenum powders	238,000	232,000	13,400	1,930	1,910	220	18,600	15,000	1,680
Molybdenum unwrought	318,000 ^r	317,000 ^r	14,300 ^r	36,300	35,800	2,740	213,000	211,000	13,900
Molybdenum waste and scrap	1,910,000	1,540,000	68,000 ^r	114,000	113,000	7,860	674,000	580,000	34,900
Molybdenum wire	15,800	NA	1,950	1,730	NA	275	5,490	NA	936
Molybdenum other	192,000	NA	24,700 ^r	13,900	NA	2,680	71,500	NA	10,200
Total	50,900,000	XX	1,160,000 ^r	7,590,000	XX	267,000	21,100,000	XX	702,000

^rRevised. NA Not available. XX Not applicable.

Source: U.S. Census Bureau.

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

²Customs value.