Mineral Industry Surveys

For information, contact:
Lori E. Apodaca, Sulfur Commodity Specialist
National Minerals Information Center
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-7724, Fax: (703) 648-7757
Email: lapodaca@usgs.gov

Mana Saedi (Data)
Telephone: (703) 648-7971
Fax: (703) 648-7975
Email: msaedi@usgs.gov

Internet: https://www.usgs.gov/centers/nmic

SULFUR IN APRIL 2021

During April 2021, production of recovered elemental sulfur was 615,000 metric tons (t), which was 4% higher than that of March 2021 and slightly higher than that of April 2020. Total production for January through April was 2.23 million metric tons (Mt), which was 16% lower than that in the same period of 2020. Shipments were 613,000 t, which was 6% higher than those of March 2021 and 3% higher than those of April 2020. Total shipments for January through April were 2.21 Mt, which were 17% lower than those in the same period of 2020. Producers' ending stocks for April 2021 were 131,000 t (table 1).

Imports of recovered sulfur for April 2021 were estimated to be 221,000 t; exports were 71,000 t. Total imports of recovered sulfur for January through April were estimated to be 847,000 t, which were 86% higher than those in the same period of 2020. Total exports of recovered sulfur for January through April were 713,000 t, which were 31% higher than those in the same period of 2020 (tables 2, 4).

Imports of sulfuric acid for April 2021 were 324,000 t; exports were 25,000 t. Total imports for January through April were 1.16 Mt, which were 4% lower than those in the same period of 2020. Total exports of sulfuric acid for January through April were 185,000 t, which were about 2.5 times those in the same period of 2020 (tables 3, 4).

U.S. sulfur consumption, calculated as shipments minus exports plus imports, was 763,000 t in April 2021. This was 64% higher than that of March 2021 and slightly higher than that of April 2020. Total consumption for January through April was 2.34 Mt, which was 9% lower than that in the same period of 2020 (table 5).

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
SALIENT SULFUR STATISTICS[1]

(Thousand metric tons)

Period	Production			Shipments, all sources	Stocks, end of period[3]
	Petroleum[2]	Natural gas	Total		
2020:					
January–December	7,030	276	7,300	7,320	109
January–April	2,550	105	2,650	2,670	110
April	578	24	602	593	110
May	574	22	595	592	113
June	566	20	585	580	119
July	605	20	625	644	100
August	561	19	580	565	115
September	525	21	546	557	104
October	546	23	569	570	103
November	546	22	568	566	105
December	557	25	582	578	109
2021:					
January	539	31	570	566	113
February	404	46	450	450	113
March	540	51	591	576 [r]	129 [r]
April[p]	572	44	615	613	131
January–April	2,060	172	2,230	2,210	131

[p]Preliminary. [r]Revised.

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

[2]Includes a small quantity from coking operations.

[3]Subject to inventory adjustments.

TABLE 2
U.S. IMPORTS OF SULFUR[1]

(Thousand metric tons and thousand dollars)

Period	Canada		Total, all countries[2]	
	Quantity	Value[3]	Quantity	Value[3]
2020:				
January–December	1,600	63,600	2,230	121,000
January–April	362 r	16,000	455 r	34,900 r
April	159	5,140 r	252	13,700
May	148	8,230	149	8,640 r
June	145	4,960	181	8,590 r
July	130	5,320	271	16,900 r
August	108	4,800	161	10,200
September	130	4,370	186	9,290
October	137	6,990	189	10,900
November	144	6,080	199	10,600
December	136	6,830	189	11,300
2021:				
January	140 e	6,880	248 e	16,200
February	130 e	7,310	181 e	13,400
March	140 e	11,400	197 e	17,600
April	140 e	14,400	221 e	22,800
January–April	550 e	40,000	847 e	70,000

eEstimated. rRevised.

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

[2]May include other countries not listed.

[3]Declared customs valuation.

Sources: U.S. Census Bureau as adjusted by U.S. Geological Survey and Acuity Commodities.

TABLE 3
U.S. IMPORTS OF SULFURIC ACID[1]

(Thousand metric tons and thousand dollars)

Period	Canada			Mexico			Total, all countries[2]		
	Quantity	Sulfur content	Value[3]	Quantity	Sulfur content	Value[3]	Quantity	Sulfur content	Value[3]
2020:									
January–December	1,920	629	121,000	733	240	53,200	3,660	1,200	241,000
January–April	627 r	205	45,700	209	68 r	18,400	1,210	396	89,600
April	154	50	11,300	50	16	4,980	284	93	22,100
May	193	63	13,900	43	14	3,700	332	109	22,100
June	158	52	12,100	38	13 r	1,710	206 r	67 r	16,100 r
July	153	50	8,250	73	24	4,390	324 r	106 r	18,900 r
August	159	52	8,010	47	15	3,610	319	104	18,100
September	156	51	7,840	91	30	5,760	334	109	18,900
October	166	54	8,880	59	19	4,620	328	107	20,200
November	148	48	8,010	85	28	5,470	300	98	18,700
December	162	53	8,810	89	29	5,530	301	98	18,100
2021:									
January	177	58	9,690	61	20	4,620	312	102	20,300
February	153	50	8,570	52	17	3,790	233	76	15,000
March	166	54	9,500	63	20 r	4,030	291	95	17,800
April	180	59	9,620	61	20	5,530	324	106	22,000
January–April	677	221	37,400	236	77	18,000	1,160	379	75,100

rRevised.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]May include other countries not listed.
[3]Declared customs valuation.

Source: U.S. Census Bureau.

TABLE 4
U.S. EXPORTS OF SULFUR AND SULFURIC ACID[1]

(Thousand metric tons and thousand dollars)

Period	Sulfur		Sulfuric acid		
	Quantity	Value[2]	Quantity	Sulfur content	Value[2]
2020:					
January–December	1,310 r	93,300 r	195	64	25,000 r
January–April	543 r	36,600 r	75	24	10,700
April	87	7,520	31	10	2,350
May	136	9,040	17	6	2,780
June	67	6,020	11	3 r	1,400
July	98	6,740	22	7	1,610
August	160 r	10,100 r	17	5 r	2,020
September	77	5,400	16	5	2,040
October	54 r	4,770 r	16	5	2,000
November	68	5,680 r	13	4	1,220
December	105	9,020 r	9	3	1,230
2021:					
January	238	7,430	11	3 r	1,040
February	97	10,200	12	4	1,300
March	307	8,530	137	45	2,920
April	71	10,600	25	8	2,190
January–April	713	36,700	185	60	7,460

rRevised.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Declared f.a.s. (free alongside ship) valuation.

Source: U.S. Census Bureau.

TABLE 5
U.S. CONSUMPTION OF SULFUR[1]

(Thousand metric tons)

Period	Domestic sources[2]	Imports	Consumption
2020:			
January–December	6,010	2,230	8,240
January–April	2,120 r	455 r	2,580 r
April	506	252	758
May	456	149	605
June	513	181	694
July	546	271	817
August	405 r	161	566 r
September	480	186	666
October	516 r	189	705 r
November	498 r	199	697 r
December	473	189	662
2021:			
January	328	248 e	576
February	353	181 e	534
March	269 r	197 e	466 r
April[p]	542	221 e	763
January–April	1,490	847 e	2,340

[e]Estimated. [p]Prelimanary. [r]Revised.

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

[2]Calculated as shipments minus exports.

TABLE 6
RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES,
BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT[1]

(Thousand metric tons)

	January–April 2020[2]		March 2021		April 2021[p]		January–April 2021[p, 2]	
District and source	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	71	72	13	14	15	14	56	56
Natural gas	4	4	1	1	1	1	4	4
Total	75	76	14	15	16	16	60	60
PAD 2:								
Petroleum and coke	463	465	113	114 [r]	90	85	397	385
Natural gas	--	--	--	--	--	--	--	--
Total	463	465	113	114 [r]	90	85	397	385
PAD 3:								
Petroleum and coke	1,550	1,550	309	290	343	343	1,190	1,180
Natural gas	37	37	8	9	8	8	32	34
Total	1,590	1,590	318	299 [r]	350	351	1,230	1,220
PAD 4 and 5:								
Petroleum and coke	466	478	106	109	124	127	412	412
Natural gas	64	63	41	40	35	35	133	126
Total	530	539	147	149	159	162	545	538
Grand total	2,650	2,670	591	576 [r]	615	613	2,230	2,210

[p]Preliminary. [r]Revised. -- Zero.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]May include revisions to previously published data.

TABLE 7
COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS[1]

(Million metric tons per year [annualized basis] and dollars per metric ton for period shown)

		2021		
	2020	March	April	January–April
Production	7.30	6.96	7.48 [p]	6.77
Shipments	7.32 [r]	6.78 [r]	7.46 [p]	6.71
Exports of sulfur	1.31	3.62 [r]	0.87	2.17
Imports of sulfur:				
Canada	1.60	1.65	1.70	1.67
Total[2]	2.23	2.32	2.69	2.58
Exports of H_2SO_4	0.19	1.61	0.30	0.56
Imports of H_2SO_4:				
Canada	1.92	1.96	2.19	2.06
Mexico	0.73	0.74	0.75	0.72
Total[2]	3.66	3.43	3.94	3.53
Consumption:				
Domestic sources	6.01	3.16	6.59	4.54
Imports	2.23	2.32	2.69	2.58
Total	8.24	5.48	9.28	7.11
Sulfur export values[3]	71 [r]	28	149	52
Sulfur import values:[3]				
Canada	40	81	103	73
Average[3]	54	90	103	83
H_2SO_4 export values[3]	128	21	88	40
H_2SO_4 import values:[3]				
Canada	63	57	53	55
Mexico	73	64	90	76
Average[2]	66	61	68	65

[p]Preliminary. [r]Revised.

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

[2]Includes other countries not listed.

[3]Average value per ton.