

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 MARCH 2021

During March 2021, production of recovered elemental sulfur was 591,000 metric tons (t), which was 31% higher than that of February 2021 and 12% lower than that of March 2020. Total production for January through March was 1.61 million metric tons (Mt), which was 21% lower than that in the same period of 2020. Shipments were 572,000 t, which was 27% higher than those of February 2021. Total shipments for January through March were 1.59 Mt, which were 23% lower than those in the same period of 2020. Producers' ending stocks for March 2021 were 132,000 t (table 1).

Imports of recovered sulfur for March 2021 were estimated to be 197,000 t; exports were 307,000 t. Total imports of recovered sulfur for January through March were estimated to be 626,000 t, which were 38% higher than those in the same period of 2020. Total exports of recovered sulfur for January through March were 642,000 t, which were 29% higher than those in the same period of 2020 (tables 2, 4).

Imports of sulfuric acid for March 2021 were 291,000 t; exports were 137,000 t. Total imports for January through

March were 836,000 t, which were 10% lower than those in the same period of 2020. Total exports of sulfuric acid for January through March were 160,000 t, which were about 3.5 times those in the same period of 2020 (tables 3, 4).

U.S. sulfur consumption, calculated as shipments minus exports plus imports, was 462,000 t in March 2021. This was 13% lower than that of February 2021 and 30% lower than that of March 2020. Total consumption for January through March was 1.57 Mt, which was 23% lower than that in the same period of 2020 (table 5).

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TABLE 1
SALIENT SULFUR STATISTICS¹

(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–March	1,970	80	2,050	2,080	100 ^r
March	642	27	669	688	100
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 ^p	540	51	591	572	132
January–March	1,480	128	1,610	1,590	132

^pPreliminary. ^rRevised.

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

²Includes a small quantity from coking operations.

³Subject to inventory adjustments.

TABLE 2
U.S. IMPORTS OF SULFUR¹

(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–March	362	10,900	455	21,100
March	131	4,710	183	9,320
April	159	5,150	252	13,700
May	148	8,230	149	8,700
June	145	4,960	181	8,610
July	130	5,320	271	17,000
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
January–March	410 ^e	25,600	626 ^e	47,300

^eEstimated.

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

²May include other countries not listed.

³Declared customs valuation.

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

TABLE 3
U.S. IMPORTS OF SULFURIC ACID¹

(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–March	474	155	34,400	159	52 ^r	13,400	927	303	67,500
March	178	58	12,700	51	17	4,390	310	101	22,500
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	12	1,710	217	71	16,800
July	153	50	8,250	73	24	4,390	313	102	18,200
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	21	4,030	291	95	17,800
January–March	497	162	27,800	175	57	12,400	836	273	53,100

^rRevised.

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

²May include other countries not listed.

³Declared customs valuation.

Source: U.S. Census Bureau.

TABLE 4
U.S. EXPORTS OF SULFUR AND SULFURIC ACID¹

(Thousand metric tons and thousand dollars)

Period	Sulfur		Sulfuric acid		
	Quantity	Value ²	Quantity	Sulfur content	Value ²
2020:					
January–December	1,320	92,400	195	64	24,900
January–March	498	28,900	44	14	8,310
March	210	14,100	18	6	3,410
April	87	7,520	31	10	2,350
May	136	9,040	17	6	2,780
June	67	6,020	11	4	1,400
July	98	6,740	22	7	1,610
August	125	8,200	17	6	2,020
September	77	5,400	16	5	2,040
October	65	6,700	16	5	2,000
November	57	4,940	13	4	1,220
December	105	8,990	9	3	1,230
2021:					
January	238	7,430	11	4	1,040
February	97	10,200	12	4	1,300
March	307	8,530	137	45	2,920
January–March	642	26,100	160	52	5,270

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

²Declared f.a.s. (free alongside ship) valuation.

Source: U.S. Census Bureau.

TABLE 5
U.S. CONSUMPTION OF SULFUR¹

(Thousand metric tons)

Period	Domestic sources ²	Imports	Consumption
2020:			
January–December	6,010	2,230	8,240
January–March	1,580	455	2,030
March	478	183	661
April	506	252	758
May	456	149	605
June	513	181	694
July	546	271	817
August	440	161	601
September	480	186	666
October	505	189	694
November	509	199	708
December	473	189	662
2021:			
January	328	248 ^e	576
February	353	181 ^e	534
March ^p	265	197 ^e	462
January–March	946	626 ^e	1,570

^eEstimated. ^pPreliminary.

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

²Calculated as shipments minus exports.

TABLE 6
RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES,
BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT¹

(Thousand metric tons)

District and source	January–March 2020 ²		February 2021		March 2021 ^P		January–March 2021 ^{P, 2}	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	58	58	13	14	13	14	41	42
Natural gas	3	3	1	1	1	1	3	3
Total	61	61	14	15	14	15	44	45
PAD 2:								
Petroleum and coke	363	365	88	88	113	109	307	300
Natural gas	--	--	--	--	--	--	--	--
Total	363	366	88	88	113	109	307	300
PAD 3:								
Petroleum and coke	1,180	1,190	215	222	309	290	850	841
Natural gas	28	27	8	8	8	9	24	26
Total	1,210	1,220	223	231	318	298	875	867
PAD 4 and 5:								
Petroleum and coke	369	379	89	83	106	109	288	285
Natural gas	50	49	36	33	41	40	98	91
Total	419	426	125	116	147	149	386	376
Grand total	2,050	2,080	450	450	591	572	1,610	1,590

^PPreliminary. -- Zero.

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

²May include revisions to previously published data.

TABLE 7
COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS¹

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

	2020	2021		
		February	March	January– March
Production	7.30	5.87	6.96 ^P	6.53
Shipments	7.31	5.87	6.73 ^P	6.44
Exports of sulfur	1.32	1.26	3.61	2.60
Imports of sulfur:				
Canada	1.60	1.69	1.65	1.66
Total ²	2.23	2.36	2.32	2.54
Exports of H ₂ SO ₄	0.20	0.16	1.61	0.65
Imports of H ₂ SO ₄ :				
Canada	1.92	1.99	1.95	2.02
Mexico	0.73	0.68	0.74	0.71
Total ²	3.66	3.04	3.43	3.39
Consumption:				
Domestic sources	6.01	4.60	0.00	3.84
Imports	2.23	2.36	0.00	2.54
Total	8.24	6.96	0.00	6.38
Sulfur export values ³	70	105	28	41
Sulfur import values: ³				
Canada	40	56	81	62
Average ³	54	74	90	75
H ₂ SO ₄ export values ³	128	108	21	33
H ₂ SO ₄ import values: ³				
Canada	63	56	57	56
Mexico	73	73	64	71
Average ²	66	64	61	64

^PPreliminary.

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

²Includes other countries not listed.

³Average value per ton.