

# 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 OCTOBER 2020

During October 2020, production of recovered elemental sulfur was 560,000 metric tons (t), which was 4% higher than that of September 2020 and 12% lower than that of October 2019. Total production for January through October was 6.14 million metric tons (Mt), which was 8% lower than that in the same period of 2019. Shipments were 548,000 t, which were 3% higher than those of September 2020. Total shipments for January through October were 6.13 Mt, which were 8% lower than those in the same period of 2019. Producers' ending stocks for October 2020 were 101,000 t, which were slightly lower than those of September 2020 (table 1).

Imports of recovered sulfur for October 2020 were estimated at 172,000 t; exports were 65,000 t. Total imports of recovered sulfur for January through October were 1.83 Mt, which were 14% higher than those in the same period of 2019. Total exports of recovered sulfur for January through October were 1.15 Mt, which were 42% lower than those in the same period of 2019 (tables 2, 4).

Imports of sulfuric acid for October 2020 were 328,000 t; exports were 16,000 t. Total imports for January through

October were 3.06 Mt, which were 21% higher than those in the same period of 2019. Total exports of sulfuric acid for January through October were 173,000 t, which were 6% lower than those in the same period of 2019 (tables 3, 4).

U.S. sulfur consumption, calculated as shipments minus exports plus imports, was 655,000 t in October 2020. This was slightly higher than that of September 2020 and 31% higher than that of October 2019. Total consumption for January through October was 6.81 Mt, which was 8% higher than that in the same period of 2019 (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<sup>1</sup>

(Thousand metric tons)

Period	Production			Shipments, all sources	Stocks, end of period <sup>3</sup>
	Petroleum <sup>2</sup>	Natural gas	Total		
2019:					
January–December	7,790	322	8,110	8,100	124
January–October	6,410	267 <sup>r</sup>	6,680	6,680	109
October	611	28	639	643	109
November	658	27	685	676	119
December	723	29	751	746	124
2020:					
January	701	28	729	742	111
February	628	25	653	645	119
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	516	21	537	534	102
October <sup>p</sup>	537	22	560	548	101
January–October	5,910	228	6,140	6,130	101

<sup>p</sup>Preliminary. <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>Includes a small quantity from coking operations.

<sup>3</sup>Subject to inventory adjustments.

TABLE 2  
U.S. IMPORTS OF SULFUR<sup>1</sup>

(Thousand metric tons and thousand dollars)

Period	Canada		Total, all countries <sup>2</sup>	
	Quantity	Value <sup>3</sup>	Quantity	Value <sup>3</sup>
2019:				
January–December	1,450	65,900	1,850	137,000
January–October	1,200 <sup>r</sup>	60,800 <sup>r</sup>	1,600 <sup>r</sup>	130,000
October	124	3,360	178	14,500
November	119	2,790	121	3,860
December	127	2,230	129	3,270
2020:				
January	127	2,970	129	4,190
February	104	3,200	143	7,580
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	4,380	186	9,300
October	120 <sup>e</sup>	6,990	172 <sup>e</sup>	10,900
January–October	1,300 <sup>e</sup>	50,700	1,830 <sup>e</sup>	99,400

<sup>e</sup>Estimated. <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>May include other countries not listed.

<sup>3</sup>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<sup>1</sup>

(Thousand metric tons and thousand dollars)

Period	Canada			Mexico			Total, all countries <sup>2</sup>		
	Quantity	Sulfur content	Value <sup>3</sup>	Quantity	Sulfur content	Value <sup>3</sup>	Quantity	Sulfur content	Value <sup>3</sup>
2019:									
January–December	1,920	628	149,000	485	159	29,700	2,970	971	240,000
January–October	1,630	533	127,000	392	128	24,500	2,520	825	206,000
October	185	60	14,400	37	12	1,990	320	105	24,300
November	109	36	8,110	34	11	1,900	166	54	13,200
December	180	59	13,700	59	19	3,320	281	92	21,200
2020:									
January	150	49	11,200	58	19	4,670	306	100	23,400
February	147	48	10,500	51	17	4,350	311	102	21,600
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
January–October	1,610	527	105,000	560	183	42,200	3,060	998	204,000

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

<sup>2</sup>May include other countries not listed.

<sup>3</sup>Declared customs valuation.

Source: U.S. Census Bureau.

TABLE 4  
U.S. EXPORTS OF SULFUR AND SULFURIC ACID<sup>1</sup>

(Thousand metric tons and thousand dollars)

Period	Sulfur		Sulfuric acid		
	Quantity	Value <sup>2</sup>	Quantity	Sulfur content	Value <sup>2</sup>
2019:					
January–December	2,200	172,000	220	72	31,200
January–October	1,990 <sup>†</sup>	156,000 <sup>†</sup>	185	60	28,000
October	321	8,860	28	9	2,310
November	53	4,750	11	4	1,530
December	157	11,200	25	8	1,650
2020:					
January	97	4,720	16	5	2,650
February	190	10,100	10	3	2,240
March	210	14,100	18	6	3,420
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	6,750	22	7	1,610
August	125	8,210	17	6	2,020
September	77	5,400	16	5	2,040
October	65	6,700	16	5	2,000
January–October	1,150	78,500	173	57	22,500

<sup>†</sup>Revised.

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

<sup>2</sup>Declared f.a.s. (free alongside ship) valuation.

Source: U.S. Census Bureau.

TABLE 5  
U.S. CONSUMPTION OF SULFUR<sup>1</sup>

(Thousand metric tons)

Period	Domestic sources <sup>2</sup>	Imports	Consumption
2019:			
January–December	5,900	1,850	7,750
January–October	4,690 <sup>r</sup>	1,600 <sup>r</sup>	6,290 <sup>r</sup>
October	322	178	500
November	623	121	744
December	589	129	718
2020:			
January	645	129	774
February	455	143	598
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	457	186	643
October <sup>p</sup>	483	172 <sup>e</sup>	655
January–October	4,980	1,830 <sup>e</sup>	6,810

<sup>e</sup>Estimated. <sup>p</sup>Preliminary. <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>Calculated as shipments minus exports.

TABLE 6  
RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES,  
BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT<sup>1</sup>

(Thousand metric tons)

District and source	2020							
	January–October 2019 <sup>2</sup>		September		October <sup>p</sup>		January–October <sup>p, 2</sup>	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
<b>PAD 1:</b>								
Petroleum and coke	148	148	12	12	12	12	150	151
Natural gas	11	11	1	1	1	1	11	11
<b>Total</b>	<b>159</b>	<b>159</b>	<b>13</b>	<b>13</b>	<b>13</b>	<b>13</b>	<b>161</b>	<b>162</b>
<b>PAD 2:</b>								
Petroleum and coke	1,100	1,100	93	89	110	104	1,080	1,070
Natural gas	2	2	--	--	--	--	--	1
<b>Total</b>	<b>1,100</b>	<b>1,100</b>	<b>93</b>	<b>89</b>	<b>110</b>	<b>104</b>	<b>1,080</b>	<b>1,070</b>
<b>PAD 3:</b>								
Petroleum and coke	3,930	3,930	308	310	313	311	3,610	3,620
Natural gas	99	97	9	9	9	9	93	94
<b>Total</b>	<b>4,030</b>	<b>4,030</b>	<b>316</b>	<b>319</b>	<b>322</b>	<b>320</b>	<b>3,700</b>	<b>3,720</b>
<b>PAD 4 and 5:</b>								
Petroleum and coke	1,230	1,240	104	98	103	97	1,070	1,060
Natural gas	154	157	11	15	12	13	124	124
<b>Total</b>	<b>1,380</b>	<b>1,390</b>	<b>115</b>	<b>113</b>	<b>115</b>	<b>111</b>	<b>1,200</b>	<b>1,190</b>
<b>Grand total</b>	<b>6,680</b>	<b>6,680</b>	<b>537</b>	<b>534</b>	<b>560</b>	<b>548</b>	<b>6,140</b>	<b>6,130</b>

<sup>p</sup>Preliminary. -- 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 revisions to previously published data.

TABLE 7  
COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS<sup>1</sup>

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

	2019	2020		
		September	October	January– October
Production	8.11	6.55	6.61 <sup>P</sup>	7.36
Shipments	8.10	6.51	6.47 <sup>P</sup>	7.36
Exports of sulfur	2.20	0.94	0.77	1.38
Imports of sulfur:				
Canada	1.45	1.59	1.42	1.56
Total <sup>2</sup>	1.85	2.27	2.03	2.19
Exports of H <sub>2</sub> SO <sub>4</sub>	0.22	0.20	0.19	0.21
Imports of H <sub>2</sub> SO <sub>4</sub> :				
Canada	1.92	1.90	1.96	1.94
Mexico	0.49	1.11	0.70	0.67
Total <sup>2</sup>	2.97	4.07	3.87	3.67
Consumption:				
Domestic sources	5.90	5.58	5.70	5.97
Imports	1.85	2.27	2.03	2.19
Total	7.75	7.84	7.73	8.17
Sulfur export values <sup>3</sup>	78	70	103	68
Sulfur import values: <sup>3</sup>				
Canada	46 <sup>r</sup>	34	58	39
Average <sup>3</sup>	74	50	64	54
H <sub>2</sub> SO <sub>4</sub> export values <sup>3</sup>	142	127 <sup>r</sup>	125	130
H <sub>2</sub> SO <sub>4</sub> import values: <sup>3</sup>				
Canada	77 <sup>r</sup>	50	53	65
Mexico	61	63	78	75
Average <sup>2</sup>	81	57	62	67

<sup>P</sup>Preliminary. <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>Includes other countries not listed.

<sup>3</sup>Average value per ton.