

Mineral Industry Surveys

For information, contact:

Wallace P. Bolen, Soda Ash Commodity Specialist
National Minerals Information Center
Telephone: (703) 648-7727
Email: wboolen@usgs.gov

Taylor L. Nelson (Data)
Telephone: (703) 648-4971
Email: tnelson@usgs.gov

Internet:

www.usgs.gov/centers/national-minerals-information-center/mineral-industry-surveys

SODA ASH IN JUNE 2023

In June, soda ash production was 934,000 metric tons (t), a 6% decrease compared with the previous month's production, but a 4% increase compared with that of June 2022 (tables 1 and 4). For the first 6 months of 2023, soda ash production was 5.41 million metric tons (Mt), slightly less than the revised production for the first 6 months 2022. Ending stocks in June were 328,000 t, 10% more than the ending stocks from the preceding month.

Wyoming trona production in June 2023 was 1.49 Mt, a 9% decrease compared with the revised trona production in May 2023 and unchanged compared to the total in June 2022. For the first 6 months of 2023, trona production was 8.71 Mt, unchanged compared to the amount for same period of 2022 (table 1).

Exports of soda ash decreased by 12% in June 2023 to 541,000 t, compared with those in May 2023 and 3% less than those in June 2022 (tables 2, 4). For the first 6 months of 2023, exports were 3.28 Mt, unchanged compared with the amount for the same period of 2022 (table 1). Imports of soda ash in June 2023 were 645 t compared with the total of 757 t in May 2023. Soda ash import tonnages can differ significantly from month to month, but generally are much smaller than soda ash export tonnages (tables 3, 4).

Apparent consumption for June 2023 was 363,000 t, 10% more than the total for May 2023 but 4% less than the estimated total for June 2022. For the first 6 months of 2023, apparent consumption was 2.18 Mt, 6% less than the revised estimated total for the same period of 2022 (table 4). Apparent consumption can change significantly from month to month mostly owing to variation in the quantity of exports but usually stabilizes over the course of the year (table 4).

Table 5 provides reported U.S. soda ash consumption statistics. Reported consumption for the second quarter of 2023 was 1.16 Mt, essentially unchanged from the reported consumption for the second quarter of 2022. During the second quarter of 2023, 547,000 t (47%) went to glassmaking and 344,000 t (30%) was consumed in the production of chemicals.

All percentages in this report were calculated using unrounded data.

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TABLE 1
SALIENT SODA ASH STATISTICS¹

(Thousand metric tons)

	Soda ash		Wyoming trona production
Period	Production ²	Stocks, end of period	
2022:			
January-June	5,510 ^r	227 ^r	8,710 ^r
June	895	227	1,500
July	992	308	1,490
August	947	237	1,540
September	805	236	1,260
October	1,030	298	1,530
November	1,010	346	1,440
December	968	364	1,520
January–December	11,300	364	17,500
2023:			
January	884	303	1,240
February	831	309	1,340
March	868	231	1,520
April	906	250	1,470 ^r
May	991	297	1,650 ^r
June	934	328	1,490
January-June	5,410	328	8,710

^rRevised.

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

²Production data include soda ash equivalent from soda liquors only. Soda ash equivalent from mine water is not included. Soda liquors are withheld to avoid disclosing company proprietary data.

TABLE 2
U.S. EXPORTS OF SODA ASH BY COUNTRY OR LOCALITY, IN 2023¹

(Metric tons unless otherwise specified)

Country or locality	January	February	March	April	May	June			January–June		
						Quantity	Value ² (thousand dollars)	Unit value	Quantity	Percent of total quantity	Value ² (thousand dollars)
Argentina	17,000	17,500	16,500	30,100	24,500	77	77	\$994	106,000	3	40,700
Australia	28,000	--	35,000	9	35,000	27,000	10,200	376	125,000	4	48,800
Brazil	122,000	32,800	59,300	24,000	74,500	63,400	22,900	361	376,000	11	137,000
Canada	15,500	18,300	16,800	16,600	14,500	14,700	4,030	274	96,500	3	25,500
Chile	38,100	82,100	64,900	47,300	74,300	61,600	24,700	401	368,000	11	118,000
China	14	4,800	61,900	--	20,000	--	--	--	86,700	3	20,400
Colombia	18,300	40,300	11,900	500	8,000	20,300	6,820	336	99,200	3	31,500
India	31,100	3,050	1,920	5,110	43,200	22,600	6,440	286	107,000	3	31,100
Indonesia	22,500	53,200	13,700	55,200	47,900	63,500	20,800	327	256,000	8	89,400
Japan	15,500	22,700	10,100	4,800	34,400	20,200	7,940	393	108,000	3	41,300
Korea, Republic of	15,000	32,000	10,900	7,220	40,100	5,010	1,590	318	110,000	3	37,800
Malaysia	19,800	22,200	26,800	--	27,500	20,100	7,310	363	116,000	4	41,100
Mexico	133,000	121,000	153,000	142,000	117,000	114,000	31,300	275	780,000	24	211,000
Peru	7,500	11,000	5,250	17,300	300	391	141	360	41,800	1	14,600
Taiwan	13,000	15,000	14,000	221	42,500	11,500	4,220	367	96,200	3	35,300
Thailand	28,500	15,500	10,200	24,100	507	41,300	13,800	334	120,000	4	41,700
United Arab Emirates	12,000	676	27	676	--	--	--	--	13,300	(3)	3,120
Vietnam	14,800	69,200	2,500	59,900	2,000	15,300	5,830	381	164,000	5	53,200
Other	25,600	11,800	8,150	13,400	9,910	40,000	11,500	288	109,000	3	32,000
Total	577,000	573,000	523,000	448,000	616,000	541,000	180,000	332	3,280,000	100	1,050,000

-- Zero.

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

²Free alongside ship values at U.S. ports.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS OF SODA ASH BY COUNTRY OR LOCALITY, IN 2023¹

(Metric tons unless otherwise specified)

Country or locality	January	February	March	April	May	June			January–June		
						Quantity	Value ² (thousand dollars)	Unit value	Quantity	Percent of total quantity	Value ² (thousand dollars)
Canada	173	175	239	167	171	163	17	\$103	1,090	27	167
France	20	241	139	100	20	--	--	--	519	13	813
Germany	80	51	2	(3)	2	22	60	2,690	157	4	415
India	56	30	6	26	1	1	18	17,500	119	3	175
Italy	72	72	60	72	36	72	65	897	384	10	350
Japan	5	1	20	2	22	2	9	4,640	52	1	292
Mexico	98	116	200	20	236	315	123	390	985	25	494
Turkey	--	70	--	70	70	--	--	--	211	5	74
United Kingdom	89	71	72	52	154	65	46	711	502	13	465
Other	10	20	48	29	45	5	8	1,540	156	4	175
Total	603	846	785	538	757	645	345	535	4,170	100	3,420

-- Zero.

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

²Cost, insurance, and freight values at U.S. ports.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 4
U.S. APPARENT CONSUMPTION OF SODA ASH¹

(Metric tons)

Period	Production	Exports	Imports	Net stock		Apparent consumption ²
				Increase	Decrease	
2022:						
January–December	11,300,000	6,490,000	61,500 ^e	85,900	--	4,740,000 ^e
January–June	5,510,000 ^r	3,280,000	38,700 ^{r,e}	--	50,500 ^r	2,320,000 ^{r,e}
June	895,000	560,000	10,300 ^e	--	32,800	378,000 ^e
July	992,000	480,000	283	80,900	--	431,000
August	947,000	547,000	20,100 ^e	--	70,900	490,000 ^e
September	805,000	496,000	458	--	1,200	311,000
October	1,030,000	569,000	686	62,200	--	402,000
November	1,010,000	541,000	624	48,300	--	416,000
December	968,000	577,000	608	17,100	--	374,000
2023:						
January–June	5,410,000	3,280,000	4,170	--	35,100	2,180,000
January	884,000	577,000	603	--	60,200	368,000
February	831,000	573,000	846	6,050	--	253,000
March	868,000	523,000	785	--	77,900	424,000
April	906,000	448,000	538	18,600	--	439,000
May	991,000	616,000	757	47,300	--	329,000
June	934,000	541,000	645	31,100	--	363,000

^eEstimated. ^rRevised. -- Zero.

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

²Production plus imports minus exports plus or minus stock changes.

TABLE 5
REPORTED CONSUMPTION OF SODA ASH IN THE UNITED STATES, BY END USE, BY QUARTER¹

(Thousand metric tons)

NAICS ² code	End use	2022					2023		
		1st quarter	2d quarter	3d quarter	4th quarter	1st quarter- 4th quarter	1st quarter	2d quarter	1st quarter- 2d quarter
3272	Glass:								
327213	Container	267	263	251	239	1,020	273	266	539
327211	Flat	249	249	253	251	999	225	230	455
327993	Fiber	44	39	43	43	169	40	36	76
327212	Other	17	18	16	11	62	13	15	28
	Total	574	569	564	543	2,250	551	547	1,100
32518	Chemicals	306	335	312	323	1,280	313	344	656
325611	Soaps and detergents	56	59	51	55	221	53	60	113
322	Pulp and paper	8	8	8	6	31	9	35	44
221310	Water treatment ³	10	10	11	9	40	10	11	21
56221	Flue gas desulfurization	42	38	44	39	163	36	29	65
4246	Distributors	61	62	62	65	250	70 ^r	59	129
	Other	116	86	89	115	406	101	72	173
	Total domestic consumption ⁴	1,170	1,170	1,140	1,160	4,640	1,140 ^r	1,160	2,300
	Exports ⁵	1,620	1,550	1,610	1,620	6,410	1,530	1,530	3,060
	Canada	49	44	44	44	181	45	40	85
	Total industry sales ⁶	2,790	2,720	2,760	2,780	11,000	2,740	2,690	5,430
	Total sales from plants	2,840	2,530	2,740	2,870	11,000	2,680	2,510	5,180
	Total production	2,820	2,690	2,740	3,010	11,300	2,580	2,830	5,410

^rRevised.

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

²North American Industry Classification System.

³Includes soda ash equivalent from soda liquors and purge liquors sold to power plants for water treatment. Sales of mine water are excluded.

⁴Imports reported by the producer/importer have been distributed into appropriate end-use categories listed above.

⁵As reported by producers; includes Canada. Data may not necessarily agree with those reported by the U.S. Census Bureau for the same periods.

⁶Represents soda ash from domestic origin (production and inventory changes) and imports and exports. Includes soda ash sold by coproducers and distributed by purchasers into appropriate end-use categories.