SODA ASH

(Data in thousand metric tons unless otherwise specified)

Domestic Production and Use: The total value of domestic soda ash (sodium carbonate) produced in 2025 was an estimated $1.8 billion[1] and the quantity produced was an estimated 12 million tons, 3% more than that in 2024. The U.S. soda ash industry consisted of four companies in Wyoming operating five plants and one company in California operating one plant. The five producing companies have a combined nameplate capacity of 13.9 million tons per year (15.3 million short tons per year). Borax, salt, and sodium sulfate were produced as coproducts of sodium carbonate production in California. Chemical caustic soda, sodium bicarbonate, and sodium sulfite were manufactured as coproducts at several of the Wyoming soda ash plants. Sodium bicarbonate was produced at an operation in Colorado using soda ash feedstock shipped from the company's Wyoming facility.

Based on 2025 quarterly reports, the estimated distribution of soda ash by end use was glass, 45%; chemicals, 28%; miscellaneous uses, 9%; distributors, 7%; soap and detergents, 5%; flue gas desulfurization, 4%; pulp and paper, 1%; and water treatment, 1%.

Salient Statistics—United States:	2021	2022	2023	2024	2025[e]
Production[2]	11,300	11,300	10,900	11,700	12,000
Imports for consumption	115	61	45	71	35
Exports	6,840	6,470	6,660	7,400	6,900
Consumption:					
Apparent[3]	4,550	4,760	4,360	4,350	4,700
Reported	4,640	4,640	4,460	4,350	4,300
Price, average unit value of sales (natural source), free on board (f.o.b.) mine or plant:					
Dollars per metric ton	133.37	178.52	211.48	169.35	150
Dollars per short ton	120.99	161.95	191.85	153.63	140
Stocks, producer, yearend	278	364	251	245	300
Employment, mine and plant, number[e]	2,400	2,400	2,400	2,400	2,400
Net import reliance[4] as a percentage of apparent consumption	E	E	E	E	E

Recycling: No soda ash was recycled by producers; however, glass container producers use cullet glass, thereby reducing soda ash consumption.

Import Sources (2021–24): Turkey, 89%; Canada, 3%; Mexico, 3%; and other, 5%.

Tariff: Item	Number	Normal Trade Relations 12–31–25
Disodium carbonate	2836.20.0000	1.2% ad valorem.

Depletion Allowance: Natural, 14% (domestic and foreign).

Government Stockpile: None.

Events, Trends, and Issues: Domestic production of soda ash in 2025 was estimated to have increased by 3% compared with that in 2024, and estimated exports decreased by 7%. Reported consumption decreased by 2%; however, apparent consumption increased by 7% compared with that in 2024. More than 50% of U.S. soda ash production was exported in 2025. In March, a major soda ash producer acquired a leading U.S. company based in Wyoming, which included two trona mines and associated industrial assets as part of the transaction.

Producers in China, Turkey, and the United States benefited from relatively low production costs and lower environmental impacts associated with natural soda ash. In contrast, synthetic soda ash production typically consumes more energy and costs more, placing natural soda ash producers at a competitive advantage.

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China remained the leading global producer of soda ash in 2025, with an estimated output of 38 million tons, most of which was synthetic. The United States and Turkey, in descending order, were the next leading producers. Together, these three countries accounted for approximately 80% of global soda ash production. Global soda ash prices declined during 2025, owing to oversupply and weak demand from key industries. This trend was largely driven by China's expansion of natural soda ash production in Inner Mongolia, which added about 5 million tons per year of capacity in mid-2023.

World Mine Production and Reserves: Production in 2024 was revised significantly for Turkey based on company reports.

	Mine production		Reserves[5, 6]
	2024	2025[e]	
Natural:			
United States	11,700	12,000	[7]23,000,000
Botswana	298	290	16,000
Ethiopia	[e]18	18	400,000
Kenya	265	270	7,000
Turkey[8]	[e]6,100	6,000	840,000
Other countries[9]	NA	NA	280,000
World total, natural (rounded)	18,400	19,000	25,000,000
World total, synthetic	52,200	52,000	XX
World total, natural and synthetic (rounded)	70,600	71,000	XX

World Resources:[6] Natural soda ash is obtained from trona and sodium carbonate-rich brines. The world's largest deposit of trona is in the Green River Basin of Wyoming. About 47 billion tons of identified soda ash resources could be recovered from the 56 billion tons of bedded trona and the 47 billion tons of interbedded or intermixed trona and halite, which are in beds more than 1.2 meters thick. Underground room-and-pillar mining, using conventional and continuous mining, is the primary method of mining Wyoming trona ore. This method has an average mining recovery rate of 45%, whereas average recovery from solution mining is 30%. Improved solution-mining techniques, such as horizontal drilling to establish communication between well pairs, could increase this extraction rate and enable companies to develop deeper trona beds. Wyoming trona resources are being depleted at the rate of about 15 million tons per year (8.3 million tons of soda ash). Searles Lake and Owens Lake in California contain an estimated 810 million tons of soda ash reserves. At least 95 natural sodium carbonate deposits have been identified in the world, the resources of only some of which have been quantified. Although soda ash can be manufactured from salt and limestone, both of which are practically inexhaustible, synthetic soda ash is costlier to produce and generates environmental wastes.

Substitutes: Caustic soda can be substituted for soda ash in certain uses, particularly in the pulp and paper, water treatment, and certain chemical sectors. Soda ash, soda liquors, or trona can be used as feedstock to manufacture chemical caustic soda, which is an alternative to electrolytic caustic soda.

[e]Estimated. E Net exporter. NA Not available. XX Not applicable.

[1]Does not include values for soda liquors and mine waters.

[2]Natural only.

[3]Defined as production + imports – exports ± adjustments for industry stock changes.

[4]Defined as imports – exports ± adjustments for industry stock changes.

[5]The reported quantities are sodium carbonate only. About 1.8 tons of trona yields 1 ton of sodium carbonate.

[6]See Appendix C for resource and reserve definitions and information concerning data sources.

[7]From trona, nahcolite, and dawsonite deposits, in order of abundance and commercial significance.

[8]Turkey is estimated to produce synthetic soda ash; however, because the majority of soda ash production is from natural trona, Turkey's production is included in "World total, natural."

[9]China is estimated to produce natural trona; however, because the majority of soda ash production is synthetic, China's production is included in "World total, synthetic."