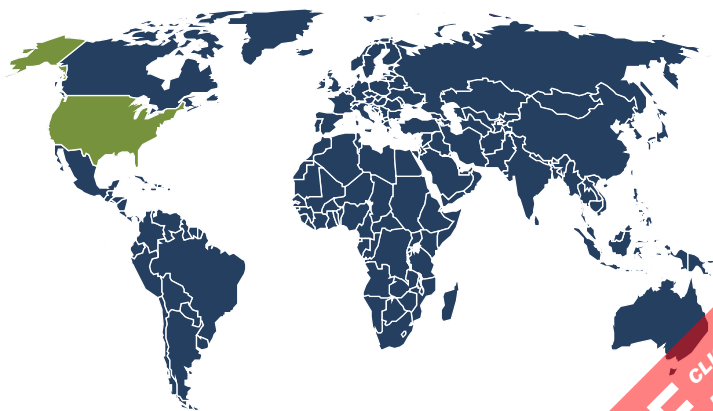




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# Alkalies & Chlorine: United States

September 2020



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# About This Report

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## Scope

This report forecasts to 2020 and 2024 US alkalis and chlorine demand and shipments in nominal US dollars at the manufacturer level. Total demand and shipments are segmented by product in terms of:

- caustic soda (sodium hydroxide)
- chlorine
- soda ash (sodium carbonate)
- other alkalis such as sodium bicarbonate (baking soda), caustic potash, and potassium carbonate

To illustrate historical trends, total demand, total shipments, the various segments, and trade are provided in annual series from 2009 to 2019.

Sodium hypochlorite (bleach) is not included in this report. Additionally, alkali and chlorine products that are further processed into other products at the site of manufacture (such as caustic soda and chlorine further processed to create bleach or chlorine used to manufacture ethylene dichloride) are excluded from the report. Re-exports of alkalis and chlorine are excluded from demand and trade figures.

Key macroeconomic indicators are also provided with quantified trends. Other various topics, including profiles of pertinent leading companies, are covered in this report. A full outline of report items by page is available in the Table of Contents.

## Sources

*Alkalis & Chlorine: United States* (FF35010) represents the synthesis and analysis of data from various secondary, macroeconomic, and demographic sources, such as:

- firms participating in the industry, and their suppliers and customers
- government/public agencies
- intergovernmental organizations
- trade associations and their publications
- the business and trade press
- indicator forecasts by The Freedonia Group
- the findings of other reports and studies by The Freedonia Group

Specific sources and additional resources are listed in the Resources section of this publication for reference and to facilitate further research.

## Industry Codes

Table 8 | NAICS & SIC Codes Related to Alkalies & Chlorine

NAICS/SCIAN 2017		SIC	
North American Industry Classification System		Standard Industrial Classification	
212391	Potash, Soda, and Borate Mineral Mining	1474	Potash, Soda, and Borate Minerals
322110	Pulp Mills	2611	Pulp Mills
325180	Other Basic Inorganic Chemical Manufacturing	2812	Alkalies and Chlorine
325211	Plastics Material and Resin Manufacturing	2819	Industrial Inorganic Chemicals, Nec
325611	Soap and Other Detergent Manufacturing	2821	Plastics Materials and Resins
325612	Polish and Other Sanitation Good Manufacturing	2841	Soap and Other Detergents
331313	Alumina Refining and Primary Aluminum Production	2842	Polishes and Sanitation Goods

Source: US Census Bureau

## Freedonia Methodology

The Freedonia Group, a subsidiary of MarketResearch.com, has been in business for more than 30 years and in that time has developed a comprehensive approach to data analysis that takes into account the variety of industries covered and the evolving needs of our customers.

Every industry presents different challenges in market sizing and forecasting, and this requires flexibility in methodology and approach. Freedonia methodology integrates a variety of quantitative and qualitative techniques to present the best overall picture of a market's current position as well as its future outlook: When published data are available, we make sure they are correct and representative of reality. We understand that published data often have flaws either in scope or quality, and adjustments are made accordingly. Where no data are available, we use various methodologies to develop market sizing (both top-down and bottom-up) and then triangulate those results to come up with the most accurate data series possible. Regardless of approach, we also talk to industry participants to verify both historical perspective and future growth opportunities.

Methods used in the preparation of Freedonia market research include, but are not limited to, the following activities: comprehensive data mining and evaluation, primary research, consensus forecasting and analysis, ratio analysis using key indicators, regression analysis, end use growth indices and intensity factors, purchase power parity adjustments for global data, consumer and end user surveys, market share and corporate sales analysis, product lifespan analysis, product or market life cycle analysis, graphical data modeling, long-term historical trend analysis, bottom-up and top-down demand modeling, and comparative market size ranking.

## About This Report

Freedonia quantifies trends in various measures of growth and volatility. Growth (or decline) expressed as an average annual growth rate (AAGR) is the least squares growth rate, which takes into account all available datapoints over a period. The volatility of datapoints around a least squares growth trend over time is expressed via the coefficient of determination, or  $r^2$ . The most stable data series relative to the trend carries an  $r^2$  value of 1.0; the most volatile – 0.0. Growth calculated as a compound annual growth rate (CAGR) employs, by definition, only the first and last datapoints over a period. The CAGR is used to describe forecast growth, defined as the expected trend beginning in the base year and ending in the forecast year. Readers are encouraged to consider historical volatility when assessing particular annual values along the forecast trend, including in the forecast year.

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## Resources

### The Freedonia Group

#### Freedonia Industry Studies

*Global Flat Glass*

*Global Pools & Spas*

*Global Salt*

*Global Water Treatment Equipment & Chemicals*

*Industrial & Institutional Cleaning Chemicals*

*Window & Door Components*

#### Freedonia Focus Reports

*Aluminum: United States*

*Flat Glass: Europe*

*Flat Glass: United States*

*Industrial Gases: United States*

*Packaging: United States*

*Polyvinyl Chloride: United States*

*Potash: United States*

*Recovered Glass: United States*

*Thermoplastic Resins: United States*

*Salt: United States*

#### Freedonia Custom Research

### Trade Publications

*Chemical & Engineering News*

*Chemical Week*

*ICIS Chemical Business*

*Journal of Light Construction*

*Oil & Gas Journal*

### Agencies & Associations

American Chemical Society

American Chemistry Council

American Natural Soda Ash Corporation

The Chlorine Institute

US Bureau of Labor Statistics

US Census Bureau

US Environmental Protection Agency

US Geological Survey

## About This Report

US International Trade Commission  
The Vinyl Institute  
World Chlorine Council