

Calcium Nitrate Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Application (Fertilizers, Wastewater Treatment Chemicals, Concrete Manufacturing, Explosives and Others), By Process (Limestone with Nitric Acid, Phosphate Rock with Nitric Acid and Ammonium Nitrate with Calcium Hydroxide), By Grade (Agriculture, Greenhouse, Horticulture, Liquid, Industrial), By Region and Competition, 2020-2030F

Market Report | 2025-08-25 | 180 pages | TechSci Research

AVAILABLE LICENSES:

- Single User License \$4500.00
- Multi-User License \$5500.00
- Custom Research License \$8000.00

Report description:

Market Overview

Global Calcium Nitrate Market was valued at USD 13.11 billion in 2024 and is expected to reach USD 17.07 billion in the forecast period with a CAGR of 4.46% through 2030. Calcium nitrate plays a crucial role as a vital component in fertilizers, providing essential nutrients for plants to thrive. These fertilizers, enriched with nitrogen and calcium, serve as fundamental building blocks for plant growth and development. By facilitating the absorption of potassium, magnesium, and calcium in the soil, calcium nitrate not only enhances the overall quality and yield of crops but also contributes to the longevity and resilience of natural products. Moreover, beyond its significance in agriculture, calcium nitrate finds multifaceted applications in various industries. Its commercial distribution extends to sectors such as the synthesis of explosives, wastewater treatment, pharmaceutical manufacturing, and cement production. Furthermore, its utility extends to water treatment, including municipal water treatment, and even as an effective agent to eliminate unpleasant odors in tissues. With its diverse range of applications, calcium nitrate proves to be a versatile compound that plays a pivotal role in multiple fields, making it an indispensable component in numerous industrial processes.

Key Market Drivers

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Growing Demand of Calcium Nitrate for Fertilizers

The global surge in demand for calcium nitrate is primarily attributed to its expanding role in the fertilizer industry, where it serves as a reliable, water-soluble nutrient source for plants. Its dual composition of nitrogen and calcium supports critical growth functions and enhances soil fertility. The adoption of calcium nitrate-based fertilizers has gained momentum due to their fast nutrient delivery and compatibility with modern irrigation systems. According to a 2024 survey, over 65% of commercial greenhouse farmers globally reported using calcium nitrate in their nutrient management practices.

As the global population continues to rise, agricultural output must keep pace to ensure food security. This necessity has prompted increased use of fertilizers that promote higher crop productivity. Calcium nitrate aids in faster nutrient absorption and minimizes soil salinity, which is vital for maintaining long-term soil health. A 2023 report indicated that crops treated with calcium nitrate witnessed up to a 17% increase in yield compared to those treated with conventional nitrogen sources. This makes it a preferred choice for both open-field and protected cultivation systems.

Another factor driving its demand is the global shift toward sustainable farming. Nitrate-based fertilizers, such as calcium nitrate, are known for their reduced environmental footprint. Unlike urea-based fertilizers, they release minimal greenhouse gases and offer better leaching control. This aligns well with global sustainability goals and the agricultural industry's transition to eco-friendly inputs. As climate-smart agriculture gains prominence, the use of calcium nitrate is expected to intensify, especially in regions dealing with soil degradation and water scarcity.

Key Market Challenges

Increasing Use of Organic-Based Fertilizers

The shift towards organic-based fertilizers is anticipated to significantly impede the global demand for calcium nitrate in the coming years. As growing concern surrounds the environmental and health impacts of chemical-based fertilizers like calcium nitrate, the agricultural industry has been gradually transitioning to more sustainable and eco-friendly alternatives. The use of organic-based fertilizers, derived from natural materials like plant wastes or animal manure, has risen sharply. This surge can be attributed to their manifold benefits, such as improving soil health, promoting sustainable farming, and reducing water pollution. Organic fertilizers also impact crop yield positively, as they slowly release nutrients, boosting long-term soil fertility. This trend is further bolstered by supportive government policies encouraging organic farming and consumer preference for organic produce. Consequently, as organic-based fertilizers become more prevalent, the demand for calcium nitrate, a once dominant player in the fertilizer market, is projected to decrease, marking a significant shift in agricultural practices worldwide.

Key Market Trends

Expanded Usage in Greenhouse Cultivation

The global demand for calcium nitrate is anticipated to rise, largely driven by an increase in greenhouse cultivation practices. As agricultural focus turns towards sustainable and efficient methods, greenhouse cultivation has emerged as an effective solution. Calcium nitrate plays a pivotal role in this scenario. It is a multi-functional fertilizer that not only provides essential nutrients for the plant's growth but also improves the quality of the yield. In a controlled environment such as a greenhouse, calcium nitrate proves exceptionally beneficial, enhancing the plant's absorption of sunlight, accelerating germination, and combating diseases. With an increasing global population leading to heightened food demand, the need for high productivity farming methods is more crucial than ever. This, in turn, escalates the demand for calcium nitrate. Additionally, the shift towards hydroponics - a soil-less growing technique that heavily relies on nutrient solutions like calcium nitrate - further propels its global demand. Thus, the expanding usage in greenhouse cultivation, coupled with the rising adoption of advanced farming techniques, is set to significantly boost the global demand for calcium nitrate.

Key Market Players

- [] Agrium Inc.
- [] Yara International ASA
- [] Sterling Chemicals Company
- [] Gfs Chemicals Inc.
- [] Haifa Group
- [] Uralchem Holding Plc
- [] Rural Liquid Fertilisers

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

-□Shanxi Jiaocheng Tianlong Chemical Industry Co. Ltd.

-□Prochem Inc.

-□UralChem Holding P.L.C.

Report Scope:

In this report, the Global Calcium Nitrate Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

-□Calcium Nitrate Market, By Application:

- o Fertilizers
- o Wastewater Treatment Chemicals
- o Concrete Manufacturing
- o Explosives
- o Others

-□Calcium Nitrate Market, By Process:

- o Limestone with Nitric Acid
- o Phosphate Rock with Nitric Acid
- o Ammonium Nitrate with Calcium Hydroxide

-□Calcium Nitrate Market, By Grade:

- o Agriculture
- o Greenhouse
- o Horticulture
- o Liquid
- o Industrial

-□Calcium Nitrate Market, By Region:

- o North America
 - United States
 - Canada
 - Mexico
- o Europe
 - France
 - United Kingdom
 - Italy
 - Germany
 - Spain
- o Asia-Pacific
 - China
 - India
 - Japan
 - Australia
 - South Korea
- o South America
 - Brazil
 - Argentina
 - Colombia
- o Middle East & Africa
 - South Africa
 - Saudi Arabia
 - UAE

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global Calcium Nitrate Market.

Available Customizations:

Global Calcium Nitrate market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

-□ Detailed analysis and profiling of additional market players (up to five).

Table of Contents:

1. Product Overview
 - 1.1. Market Definition
 - 1.2. Scope of the Market
 - 1.2.1. Markets Covered
 - 1.2.2. Years Considered for Study
 - 1.2.3. Key Market Segmentations
2. Research Methodology
 - 2.1. Objective of the Study
 - 2.2. Baseline Methodology
 - 2.3. Key Industry Partners
 - 2.4. Major Association and Secondary Sources
 - 2.5. Forecasting Methodology
 - 2.6. Data Triangulation & Validations
 - 2.7. Assumptions and Limitations
3. Executive Summary
 - 3.1. Overview of the Market
 - 3.2. Overview of Key Market Segmentations
 - 3.3. Overview of Key Market Players
 - 3.4. Overview of Key Regions/Countries
 - 3.5. Overview of Market Drivers, Challenges, Trends
4. Voice of Customer
5. Global Calcium Nitrate Market Outlook
 - 5.1. Market Size & Forecast
 - 5.1.1. By Value
 - 5.2. Market Share & Forecast
 - 5.2.1. By Application (Fertilizers, Wastewater Treatment Chemicals, Concrete Manufacturing, Explosives and Others)
 - 5.2.2. By Process (Limestone with Nitric Acid, Phosphate Rock with Nitric Acid and Ammonium Nitrate with Calcium Hydroxide)
 - 5.2.3. By Grade (Agriculture, Greenhouse, Horticulture, Liquid, Industrial)
 - 5.2.4. By Region
 - 5.2.5. By Company (2024)
 - 5.3. Market Map
6. North America Calcium Nitrate Market Outlook
 - 6.1. Market Size & Forecast
 - 6.1.1. By Value
 - 6.2. Market Share & Forecast
 - 6.2.1. By Application
 - 6.2.2. By Process
 - 6.2.3. By Grade

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 6.2.4. By Country
- 6.3. North America: Country Analysis
 - 6.3.1. United States Calcium Nitrate Market Outlook
 - 6.3.1.1. Market Size & Forecast
 - 6.3.1.1.1. By Value
 - 6.3.1.2. Market Share & Forecast
 - 6.3.1.2.1. By Application
 - 6.3.1.2.2. By Process
 - 6.3.1.2.3. By Grade
 - 6.3.2. Canada Calcium Nitrate Market Outlook
 - 6.3.2.1. Market Size & Forecast
 - 6.3.2.1.1. By Value
 - 6.3.2.2. Market Share & Forecast
 - 6.3.2.2.1. By Application
 - 6.3.2.2.2. By Process
 - 6.3.2.2.3. By Grade
 - 6.3.3. Mexico Calcium Nitrate Market Outlook
 - 6.3.3.1. Market Size & Forecast
 - 6.3.3.1.1. By Value
 - 6.3.3.2. Market Share & Forecast
 - 6.3.3.2.1. By Application
 - 6.3.3.2.2. By Process
 - 6.3.3.2.3. By Grade
- 7. Europe Calcium Nitrate Market Outlook
 - 7.1. Market Size & Forecast
 - 7.1.1. By Value
 - 7.2. Market Share & Forecast
 - 7.2.1. By Application
 - 7.2.2. By Process
 - 7.2.3. By Grade
 - 7.2.4. By Country
 - 7.3. Europe: Country Analysis
 - 7.3.1. Germany Calcium Nitrate Market Outlook
 - 7.3.1.1. Market Size & Forecast
 - 7.3.1.1.1. By Value
 - 7.3.1.2. Market Share & Forecast
 - 7.3.1.2.1. By Application
 - 7.3.1.2.2. By Process
 - 7.3.1.2.3. By Grade
 - 7.3.2. United Kingdom Calcium Nitrate Market Outlook
 - 7.3.2.1. Market Size & Forecast
 - 7.3.2.1.1. By Value
 - 7.3.2.2. Market Share & Forecast
 - 7.3.2.2.1. By Application
 - 7.3.2.2.2. By Process
 - 7.3.2.2.3. By Grade
 - 7.3.3. Italy Calcium Nitrate Market Outlook

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 7.3.3.1. Market Size & Forecast
 - 7.3.3.1.1. By Value
- 7.3.3.2. Market Share & Forecast
 - 7.3.3.2.1. By Application
 - 7.3.3.2.2. By Process
 - 7.3.3.2.3. By Grade
- 7.3.4. France Calcium Nitrate Market Outlook
 - 7.3.4.1. Market Size & Forecast
 - 7.3.4.1.1. By Value
 - 7.3.4.2. Market Share & Forecast
 - 7.3.4.2.1. By Application
 - 7.3.4.2.2. By Process
 - 7.3.4.2.3. By Grade
- 7.3.5. Spain Calcium Nitrate Market Outlook
 - 7.3.5.1. Market Size & Forecast
 - 7.3.5.1.1. By Value
 - 7.3.5.2. Market Share & Forecast
 - 7.3.5.2.1. By Application
 - 7.3.5.2.2. By Process
 - 7.3.5.2.3. By Grade
- 8. Asia-Pacific Calcium Nitrate Market Outlook
 - 8.1. Market Size & Forecast
 - 8.1.1. By Value
 - 8.2. Market Share & Forecast
 - 8.2.1. By Application
 - 8.2.2. By Process
 - 8.2.3. By Grade
 - 8.2.4. By Country
 - 8.3. Asia-Pacific: Country Analysis
 - 8.3.1. China Calcium Nitrate Market Outlook
 - 8.3.1.1. Market Size & Forecast
 - 8.3.1.1.1. By Value
 - 8.3.1.2. Market Share & Forecast
 - 8.3.1.2.1. By Application
 - 8.3.1.2.2. By Process
 - 8.3.1.2.3. By Grade
 - 8.3.2. India Calcium Nitrate Market Outlook
 - 8.3.2.1. Market Size & Forecast
 - 8.3.2.1.1. By Value
 - 8.3.2.2. Market Share & Forecast
 - 8.3.2.2.1. By Application
 - 8.3.2.2.2. By Process
 - 8.3.2.2.3. By Grade
 - 8.3.3. Japan Calcium Nitrate Market Outlook
 - 8.3.3.1. Market Size & Forecast
 - 8.3.3.1.1. By Value
 - 8.3.3.2. Market Share & Forecast

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 8.3.3.2.1. By Application
- 8.3.3.2.2. By Process
- 8.3.3.2.3. By Grade
- 8.3.4. South Korea Calcium Nitrate Market Outlook
 - 8.3.4.1. Market Size & Forecast
 - 8.3.4.1.1. By Value
 - 8.3.4.2. Market Share & Forecast
 - 8.3.4.2.1. By Application
 - 8.3.4.2.2. By Process
 - 8.3.4.2.3. By Grade
- 8.3.5. Australia Calcium Nitrate Market Outlook
 - 8.3.5.1. Market Size & Forecast
 - 8.3.5.1.1. By Value
 - 8.3.5.2. Market Share & Forecast
 - 8.3.5.2.1. By Application
 - 8.3.5.2.2. By Process
 - 8.3.5.2.3. By Grade
- 9. South America Calcium Nitrate Market Outlook
 - 9.1. Market Size & Forecast
 - 9.1.1. By Value
 - 9.2. Market Share & Forecast
 - 9.2.1. By Application
 - 9.2.2. By Process
 - 9.2.3. By Grade
 - 9.2.4. By Country
 - 9.3. South America: Country Analysis
 - 9.3.1. Brazil Calcium Nitrate Market Outlook
 - 9.3.1.1. Market Size & Forecast
 - 9.3.1.1.1. By Value
 - 9.3.1.2. Market Share & Forecast
 - 9.3.1.2.1. By Application
 - 9.3.1.2.2. By Process
 - 9.3.1.2.3. By Grade
 - 9.3.2. Argentina Calcium Nitrate Market Outlook
 - 9.3.2.1. Market Size & Forecast
 - 9.3.2.1.1. By Value
 - 9.3.2.2. Market Share & Forecast
 - 9.3.2.2.1. By Application
 - 9.3.2.2.2. By Process
 - 9.3.2.2.3. By Grade
 - 9.3.3. Colombia Calcium Nitrate Market Outlook
 - 9.3.3.1. Market Size & Forecast
 - 9.3.3.1.1. By Value
 - 9.3.3.2. Market Share & Forecast
 - 9.3.3.2.1. By Application
 - 9.3.3.2.2. By Process
 - 9.3.3.2.3. By Grade

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

10. Middle East and Africa Calcium Nitrate Market Outlook

10.1. Market Size & Forecast

10.1.1. By Value

10.2. Market Share & Forecast

10.2.1. By Application

10.2.2. By Process

10.2.3. By Grade

10.2.4. By Country

10.3. MEA: Country Analysis

10.3.1. South Africa Calcium Nitrate Market Outlook

10.3.1.1. Market Size & Forecast

10.3.1.1.1. By Value

10.3.1.2. Market Share & Forecast

10.3.1.2.1. By Application

10.3.1.2.2. By Process

10.3.1.2.3. By Grade

10.3.2. Saudi Arabia Calcium Nitrate Market Outlook

10.3.2.1. Market Size & Forecast

10.3.2.1.1. By Value

10.3.2.2. Market Share & Forecast

10.3.2.2.1. By Application

10.3.2.2.2. By Process

10.3.2.2.3. By Grade

10.3.3. UAE Calcium Nitrate Market Outlook

10.3.3.1. Market Size & Forecast

10.3.3.1.1. By Value

10.3.3.2. Market Share & Forecast

10.3.3.2.1. By Application

10.3.3.2.2. By Process

10.3.3.2.3. By Grade

10.4. Drivers

10.5. Challenges

11. Market Trends & Developments

11.1. Recent Development

11.2. Mergers & Acquisitions

11.3. Product Launches

12. Global Calcium Nitrate Market: SWOT Analysis

13. Porter's Five Forces Analysis

13.1. Competition in the Industry

13.2. Potential of New Entrants

13.3. Power of Suppliers

13.4. Power of Customers

13.5. Threat of Substitute Products

14. Competitive Landscape

14.1. Agrium Inc.

14.1.1. Business Overview

14.1.2. Service Offerings

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 14.1.3. Recent Developments
- 14.1.4. Key Personnel
- 14.1.5. Swot Analysis
- 14.2. Yara International ASA
- 14.3. Sterling Chemicals Company
- 14.4. Gfs Chemicals Inc.
- 14.5. Haifa Group
- 14.6. Uralchem Holding Plc
- 14.7. Rural Liquid Fertilisers
- 14.8. Shanxi Jiaocheng Tianlong Chemical Industry Co. Ltd.
- 14.9. Prochem Inc.
- 14.10. UralChem Holding P.L.C.
- 15. Strategic Recommendations
- 16. About Us & Disclaimer

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Calcium Nitrate Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Application (Fertilizers, Wastewater Treatment Chemicals, Concrete Manufacturing, Explosives and Others), By Process (Limestone with Nitric Acid, Phosphate Rock with Nitric Acid and Ammonium Nitrate with Calcium Hydroxide), By Grade (Agriculture, Greenhouse, Horticulture, Liquid, Industrial), By Region and Competition, 2020-2030F

Market Report | 2025-08-25 | 180 pages | TechSci Research

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$4500.00
	Multi-User License	\$5500.00
	Custom Research License	\$8000.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-03-05"/>
		Signature	<input type="text"/>