+357 96 030922
info@marketpublishers.com

India Ammonium Nitrate Market By Grade (Agriculture, Industrial, Food, Others), By Solids (High Density Ammonium Nitrate and Low Density Ammonium Nitrate), By End Use (Agriculture, Mining, Pharmaceutical, Plastics, Pulp & Paper, Others), By Region, Competition, Forecast and Opportunities, 2020-2030F

https://marketpublishers.com/r/IE79E13578FCEN.html
Date: November 2024
Pages: 85
Price: US$ 3,500.00 (Single User License)
ID: IE79E13578FCEN

Abstracts

India Ammonium Nitrate Market achieved the total volume of 822 Thousand Tonnes in 2024 and is expected t%li%reach 997.68 Thousand Tonnes by 2030 with a CAGR of 3.48% during the forecast period. The ammonium nitrate market in India is witnessing robust growth, driven by rising demand from the agricultural, mining, and industrial sectors. As a key nitrogen fertilizer, ammonium nitrate plays an essential role in enhancing crop yields. The significant agricultural base in India results in high demand for nitrogen-based fertilizers, further intensified by the need for increased agricultural productivity amid population growth. In addition t%li%its use in agriculture, ammonium nitrate serves as an explosive in the mining industry, with the expansion of mining activities als%li%boosting market demand. Government initiatives focused on enhancing agricultural productivity and sustainability are expected t%li%further stimulate this demand.

Major manufacturers, both domestic and international, are ramping up production capacities t%li%meet the increasing needs of the market. Current investments in domestic ammonium nitrate capacity are estimated at around USD 833.82- 893.38 Million, with an additional Rs 595.59 Million earmarked for ongoing plant constructions. While India has four producers of High Density Ammonium Nitrate (HDAN), domestic production is insufficient t%li%satisfy the requirements for various explosives used in coal and non-coal mining, as well as infrastructure projects. Consequently, explosive

+357 96 030922
info@marketpublishers.com

manufacturers often blend domestic and imported ammonium nitrate.
The availability of essential raw materials, such as ammonia and nitric acid, is crucial for production, with both domestic sources and imports affecting supply stability. The production and sale of ammonium nitrate are subject t%li%stringent regulations due t%li%safety concerns related t%li%its explosive properties, which can impact market dynamics. Innovations in production technology are enhancing efficiency and lowering costs, potentially increasing competition in the market.
There is a rising trend toward using controlled-release fertilizers, including ammonium nitrate, t%li%minimize environmental impact while maximizing agricultural output. Demand is particularly strong in states with intensive agricultural practices, such as Punjab, Haryana, and Maharashtra, as well as in regions with active mining operations.
The ammonium nitrate market in India is positioned for steady growth, driven by agricultural and industrial demands. However, it must navigate regulatory challenges and price volatility t%li%sustain this growth. As the industry evolves, an emphasis on sustainability and technological advancements will be critical in shaping its future.
Key Market Drivers
Rising Agricultural Demand
Rising demand from the agricultural sector is a key driver for the ammonium nitrate market in India. As the population continues t%li%grow, the need for food production intensifies. In April 2024, the World Bank indicated that India has overtaken China last year as the world's most populous nation, reaching 1.4 billion people. The country is projected t%li%achieve a growth rate of 7.5% in the fiscal year ending in March, up from 7% in the previous year. This growth underscores the urgency for enhanced food production, pushing farmers t%li%improve yields, often using nitrogen fertilizers like ammonium nitrate.
With increasing incomes, dietary patterns in India are shifting toward more protein-rich foods, such as pulses, fruits, and vegetables, which demand more intensive cultivation practices. Consequently, there is a rising demand for cash crops and vegetables, which require higher nitrogen levels for optimal growth, leading t%li%greater reliance on ammonium nitrate.
The Indian government supports this trend through various fertilizer subsidy programs, making them more affordable for farmers. For instance, the finance minister has allocated USD 18.10 Billion for agriculture and allied sectors in FY 25, representing 3.1% of the total expenditure of USD 574.10 Billion. Additionally, USD 19.53 Billion has been set aside for fertilizer subsidies in the upcoming financial year, promoting the use of ammonium nitrate.
Government initiatives aimed at enhancing agricultural productivity, such as the Pradhan Mantri Krishi Sinchai Yojana (PMKSY) and the National Bio-Fertilizer Scheme (NBS), further encourage the adoption of chemical fertilizers. Farmers are diversifying

+357 96 030922
info@marketpublishers.com

their crop choices t%li%include more high-value and nutrient-demanding varieties, necessitating targeted fertilization strategies that prominently feature ammonium nitrate. As sustainable agricultural practices gain traction, farmers are implementing best practices that optimize fertilizer use. Ammonium nitrate is preferred for its rapid-release nitrogen, facilitating easier nutrient uptake by plants. Furthermore, farmers are increasingly integrating organic and chemical fertilizers, with ammonium nitrate complementing organic practices t%li%enhance soil health and productivity. Agricultural extension services play a crucial role in educating farmers about the advantages of ammonium nitrate, and initiatives that promote best practices in fertilizer use are enhancing adoption rates. By addressing the growing population's needs, evolving dietary preferences, and supportive government initiatives, the ammonium nitrate market is well-positioned for growth within India’s agricultural landscape.

Rising Industrial Applications

Ammonium nitrate is a key component in the production of blasting agents, especially within the mining and construction industries, due t%li%its effectiveness in controlled explosions. India's abundant mineral resources drive significant demand for ammonium nitrate-based explosives, as the country produces 95 different minerals, including fuel, metallic, non-metallic, atomic, and minor minerals. According t%li%the India Economic Survey, the mining sector grew by 7.5% in FY24, with substantial increases in iron ore and limestone production. As mining operations expand, the demand for efficient blasting agents rises.

Furthermore, large-scale infrastructure projects such as road construction, dam projects, and urban development als%li%contribute t%li%the heightened need for explosives, thus boosting the demand for ammonium nitrate. Additionally, beyond its use in explosives, ammonium nitrate is utilized in various chemical manufacturing processes, including the production of nitric acid and other nitrogen-based chemicals, broadening its application across multiple industrial sectors.

Government initiatives like the National Infrastructure Pipeline and Smart Cities Mission are driving investments in infrastructure, which directly increases the consumption of ammonium nitrate in construction activities. The implementation of stringent safety regulations for handling and storing explosives enhances the industry's willingness t%li%utilize ammonium nitrate, given its manageable nature under controlled conditions. A heightened focus on worker training and safety standards promotes the responsible use of ammonium nitrate, encouraging its acceptance in the industry.

Rapid urbanization in India leads t%li%increased construction and industrial activities, which directly correlates with higher consumption of ammonium nitrate. As industries continue t%li%grow and innovate, ammonium nitrate is poised t%li%play a vital role in supporting economic growth and industrial development in the region.

Key Market Challenges

+357 96 030922
info@marketpublishers.com

Rising imports

The influx of imported ammonium nitrate int%li%the Indian market heightens competition for local manufacturers. Imported products are often priced lower due t%li%economies of scale and lower production costs in other countries, forcing domestic producers t%li%reduce their prices t%li%stay competitive. According t%li%the Indian Ammonium Nitrate Manufacturers Association (IANMA), uncontrolled imports have caused capacity utilization t%li%decline from 86% in FY19 t%li%75% during the period of April t%li%December 2023. Notably, nearly all imported ammonium nitrate over the past 18 months has come from Russia. During the period of April t%li%November 2023, imports surged by 113%, rising t%li%305,000 tonnes compared t%li%143,000 tonnes in the same timeframe the previous year.

This surge in imports can result in market saturation, where supply surpasses demand, leading t%li%depressed prices that make it challenging for domestic producers t%li%sell their products profitably. Additionally, global ammonium nitrate prices are subject t%li%fluctuations due t%li%factors such as changes in oil prices, geopolitical tensions, and natural disasters affecting production in exporting countries. Such volatility can create unpredictable pricing in the Indian market, complicating local producers' ability t%li%effectively plan and price their offerings.

Heavy reliance on imported ammonium nitrate als%li%exposes the Indian market t%li%various supply chain risks. Issues like shipping delays, trade disputes, or disruptions in exporting countries such as strikes or natural disasters can lead t%li%shortages, affecting availability. As a result, Indian manufacturers become increasingly vulnerable t%li%global market dynamics. Changes in international trade policies can significantly impact the cost and availability of ammonium nitrate imports; for instance, increased tariffs or stringent regulations could drive up prices and lead t%li%shortages.

With rising imports and market saturation, potential investors may hesitate t%li%invest in new production facilities or expand existing ones, hindering the growth of the domestic ammonium nitrate industry and its competitiveness. T%li%navigate these challenges, stakeholders in the ammonium nitrate sector must enhance production efficiencies, improve product quality, and explore new market strategies t%li%maintain their position in an increasingly competitive environment.

Regulatory Compliance

Ammonium nitrate is designated as a hazardous material, resulting in stringent safety regulations governing its production, storage, handling, and transportation. Complying with these regulations often necessitates considerable investments in safety equipment and training. Manufacturers are als%li%required t%li%meet environmental regulations concerning emissions, waste disposal, and the potential environmental effects of ammonium nitrate production, which can be both costly and time-consuming.

+357 96 030922
info@marketpublishers.com

The process of acquiring the necessary permits and licenses can be complex, involving multiple government agencies, and any delays in approval may disrupt production schedules and increase operational expenses. Adhering t%li%safety and environmental standards can significantly elevate operational costs, including expenses for safety training, compliance audits, and technological investments needed t%li%meet regulatory requirements. These higher costs can squeeze profit margins, particularly in a competitive market already pressured by low-priced imports.

Non-compliance with regulations poses risks such as substantial penalties, fines, or even operational shutdowns, adding uncertainty that can affect manufacturers' financial stability. The transportation of ammonium nitrate is regulated t%li%ensure safety, but compliance can complicate logistics, raise transportation costs, and restrict distribution options. Additionally, companies must follow strict storage guidelines that may necessitate specialized facilities, limiting operational flexibility and increasing capital expenditures.

Stringent regulatory requirements can create significant barriers for new entrants in the ammonium nitrate market, potentially stifling competition and innovation and affecting overall market dynamics. T%li%succeed in this challenging environment, stakeholders must implement robust compliance strategies, invest in training and safety initiatives, and remain adaptable t%li%regulatory changes.

Key Market Trends

Rising focus on Coal Gasification

The increasing emphasis on coal gasification is having a substantial impact on the ammonium nitrate market in India. Coal gasification offers an alternative method for producing ammonia, which is essential for ammonium nitrate production. As the industry shifts towards gasification for ammonia production, it can enhance the supply chain for ammonium nitrate manufacturers. Utilizing India's rich coal reserves for ammonia production through gasification reduces reliance on imported ammonia, stabilizing both prices and supply.

The Indian government is actively promoting coal gasification as part of its energy security and diversification initiatives. Supportive policies and incentives are encouraging investments in gasification technologies that benefit the ammonium nitrate sector. For example, in January 2024, the Indian government approved incentives worth USD 1.01 Billion for coal gasification projects. This thermo-chemical process converts coal int%li%synthesis gas (syngas), which could potentially replace imports valued at USD 15.48 Billion. The process can als%li%produce methanol for blending with petrol, Di-Methyl Ether (DME) for LPG, ammonia for urea and ammonium nitrate production, and facilitate steel making through gas-based direct reduced iron, reducing the need for imported coking coal in blast furnaces, as well as producing synthetic natural gas (SNG).

+357 96 030922
info@marketpublishers.com

Coal gasification is projected t%li%be a more cost-effective method for ammonia synthesis compared t%li%traditional natural gas reforming. Lower production costs could lead t%li%reduced prices for ammonium nitrate. Additionally, large-scale coal gasification projects can achieve significant economies of scale, further driving down costs and improving profitability for ammonium nitrate producers.
Innovations in coal gasification technology are focused on minimizing emissions and environmental impacts. Processes like integrated gasification combined cycle (IGCC) contribute t%li%more sustainable ammonia production. Furthermore, integrating carbon capture and storage (CCS) technologies with coal gasification can help lower greenhouse gas emissions, aligning ammonium nitrate production with global sustainability objectives.
By providing a cost-effective and sustainable source of ammonia, this trend not only supports the growth of the ammonium nitrate industry but als%li%aligns with broader environmental and energy goals. As technology continues t%li%advance and government support strengthens, coal gasification is expected t%li%become a key component of ammonia production in India, significantly shaping market dynamics.
Segmental Insights
Solids Insights
Based on Solids, the High Density Ammonium Nitrate emerged as the dominating segment in the Indian market for Ammonium Nitrate during the forecast period. High-density ammonium nitrate (HDAN) has a higher concentration of ammonium nitrate per unit volume compared t%li%low-density options, enabling farmers and industrial users t%li%achieve desired outcomes with less product, making it a more efficient choice. HDAN is extensively utilized in the mining and construction sectors for producing explosives, as its density allows for better energy release and stability during detonation, making it ideal for controlled blasting operations.
Due t%li%its higher density, HDAN requires less volume t%li%deliver the same nitrogen content, resulting in reduced transportation and storage costs since more products can be shipped at once. Its compact form als%li%facilitates easier handling and storage, enhancing operational efficiencies for manufacturers and end-users. HDAN is more stable than low-density ammonium nitrate, which is critical for safe handling in industrial environments. It complies with stringent safety regulations for both explosives and fertilizers, making it a trustworthy choice for industries that prioritize safety. While HDAN is particularly favored in the explosives market, it is als%li%applicable in certain agricultural contexts, especially where high nitrogen levels are necessary for specific crops. It can be readily blended with other fertilizers or additives, allowing for customized nutrient management strategies in agriculture. As industries and farmers aim t%li%optimize inputs for improved yields and cost savings, the demand for high-density products is expected t%li%grow.

+357 96 030922
info@marketpublishers.com

End Use Insights

Based on End Use, Agriculture emerged as the fastest growing segment in the Indian market for Ammonium Nitrate in 2024. India's expanding population is increasing the demand for food, which necessitates a boost in agricultural productivity and a greater reliance on effective fertilizers like ammonium nitrate. This high-nitrogen fertilizer is crucial for plant growth due t%li%its quick and efficient nitrogen delivery, making it highly desirable for improving crop yields. T%li%facilitate this, the Indian government has introduced various subsidies and support programs that enhance the accessibility and affordability of ammonium nitrate for farmers. Moreover, the adoption of modern farming practices, such as precision agriculture, is promoting more efficient fertilizer use, with farmers increasingly turning t%li%ammonium nitrate t%li%optimize nutrient delivery and enhance crop health.

Growing awareness of soil health and fertility management is leading farmers t%li%seek out effective fertilizers. Ammonium nitrate is particularly recognized for its ability t%li%increase soil nitrogen levels, making it a preferred choice. Its versatility allows it t%li%be used across a wide range of crops, including cereals, pulses, and vegetables, expanding its market potential within agriculture. As climate change impacts agricultural practices, farmers are looking for fertilizers that enhance resilience and adaptability, further driving the demand for ammonium nitrate. With these factors at play, the demand for ammonium nitrate in agriculture is anticipated t%li%continue rising.

Regional Insights

Based on Region, North India emerged as the dominant region in the Indian market for Ammonium Nitrate in 2024. North India is recognized for its varied cropping patterns, particularly the high-yield crops from the Green Revolution, such as wheat and rice. These crops require substantial fertilization t%li%boost productivity, with ammonium nitrate being a preferred choice due t%li%its rapid nitrogen availability. Farmers in this region strive for maximum output, which drives extensive use of chemical fertilizers t%li%achieve their objectives.

Soil deficiencies in nitrogen in parts of North India make ammonium nitrate a vital ingredient in fertilizer formulations, as it helps restore essential soil nutrients, enhancing crop performance. The well-developed irrigation systems in states like Punjab and Haryana facilitate multiple cropping cycles each year, further increasing the demand for fertilizers, including ammonium nitrate. Additionally, the Indian government frequently provides subsidies for fertilizers, including ammonium nitrate, making them more financially accessible for farmers. Historical policies in the region have strongly supported the use of chemical fertilizers. North India is als%li%home t%li%several fertilizer production facilities, which help reduce transportation costs and ensure a consistent supply of ammonium nitrate t%li%local markets.

+357 96 030922
info@marketpublishers.com

Farmers in North India have a long-standing tradition of using ammonium nitrate, fostering established practices and trust in its effectiveness. This historical reliance diminishes the likelihood of switching t%li%alternative fertilizers. Given the competitive nature of agricultural markets, the robust agrarian economy in North India sees farmers willing t%li%invest in fertilizers t%li%optimize yields. These factors position North India as the leading region in the ammonium nitrate market.
Key Market Players

Deepak Fertilisers and Petrochemicals Corporation Limited

Mahadhan AgriTech Limited

Gujarat Narmada Valley Fertilizers & Chemicals Limited

Rashtriya Chemicals and Fertilizers Limited

National Fertilizers Limited

Yara Fertilisers India Pvt. Ltd.

Chambal Fertilisers and Chemicals Ltd.

Vijay Gas Industry Pvt. Ltd.

Machhar Industries Limited

Report Scope:
In this report, the India Ammonium Nitrate Market has been segmented int%li%the following categories, in addition t%li%the industry trends which have als%li%been detailed below:

India Ammonium Nitrate Market, By Grade:

Agriculture

Industrial

Food

+357 96 030922
info@marketpublishers.com

Others

India Ammonium Nitrate Market, By Solids:

High Density Ammonium Nitrate

Low Density Ammonium Nitrate

· India Ammonium Nitrate Market, By End Use:

Agriculture

Mining

Pharmaceutical

Plastics

Pulp & Paper

Others

India Ammonium Nitrate Market, By Region:

West India

North India

South India

East India

Competitive Landscape
Company Profiles: Detailed analysis of the major companies presents in the India Ammonium Nitrate Market.
Available Customizations:

+357 96 030922
info@marketpublishers.com

India Ammonium Nitrate Market report with the given market data, TechSci Research offers customizations according t%li%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 t%li%five).

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

6. NORTH INDIA AMMONIUM NITRATE MARKET OUTLOOK

7. SOUTH INDIA AMMONIUM NITRATE MARKET OUTLOOK

8. EAST INDIA AMMONIUM NITRATE MARKET OUTLOOK

9. WEST INDIA AMMONIUM NITRATE MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: India Ammonium Nitrate Market By Grade (Agriculture, Industrial, Food, Others), By Solids (High Density Ammonium Nitrate and Low Density Ammonium Nitrate), By End Use (Agriculture, Mining, Pharmaceutical, Plastics, Pulp & Paper, Others), By Region, Competition, Forecast and Opportunities, 2020-2030F

Product link: https://marketpublishers.com/r/IE79E13578FCEN.html

Price: US$ 3,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/IE79E13578FCEN.html