

Liquid Nitrogen Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 - 2032

<https://marketpublishers.com/r/L9ED87AA68B7EN.html>

Date: October 2024

Pages: 200

Price: US\$ 4,850.00 (Single User License)

ID: L9ED87AA68B7EN

Abstracts

The Global Liquid Nitrogen Market was valued at USD 15.3 billion in 2023 and is projected to grow at a CAGR of 5.8% from 2024 to 2032. This growth is primarily driven by the increasing applications of liquid nitrogen across diverse industries. Notable trends include a rising demand in food preservation and flash freezing, alongside significant use in healthcare for medical applications. The pharmaceutical sector's expansion and advancements in cryogenic technologies are also contributing to this upward trajectory. Regions like North America and Europe are at the forefront, thanks to their established industrial frameworks and strong demand from research institutions. Meanwhile, the Asia-Pacific region is emerging as a key growth area, propelled by rapid urbanization and industrial development. Furthermore, sustainability is becoming a crucial focus, with companies actively seeking environmentally friendly production methods. The growth of online distribution channels is improving market accessibility, making liquid nitrogen more available to various sectors. The on-site production segment is expected to reach USD 9.9 billion and achieve a 6% CAGR by 2032. This segment is anticipated to grow the fastest during the forecast period, primarily due to its cost-efficiency and environmental advantages.

This method is particularly beneficial for sectors that require large quantities of liquid nitrogen for daily operations. While demand for bulk liquid nitrogen is set to rise significantly, increasing transportation costs may pose challenges for this segment. Nevertheless, the shift toward localized production is likely to reshape supply chains, enhancing operational resilience in the liquid nitrogen market. The chemicals and pharmaceuticals segment accounted for a 23.1% market share in 2023, valued at USD 3.5 billion, and is forecasted to grow at a 5.9% CAGR from 2024 to 2032. The liquid nitrogen market is influenced by various end-user segments, each with unique trends. Applications in manufacturing are increasingly utilizing liquid nitrogen for precision cooling, while the pharmaceutical sector relies on it for temperature-sensitive

processes. In addition, its role in enhancing food quality through rapid freezing is vital, and the healthcare industry uses it for essential storage solutions. The rubber and plastics sectors also depend on liquid nitrogen to improve material characteristics and processing efficiency. Overall, the market is robust and expanding, driven by innovation and the growing adoption of liquid nitrogen across numerous industries. In the U.S., the liquid nitrogen industry is set to reach USD 3.8 billion, with a CAGR of 5.9% from 2024 to 2032. This sector has seen remarkable growth due to rising demand in various industries. The increasing use of cryogenic technologies for preservation and freezing processes is a major factor in this growth. Additionally, sustainability efforts are prompting companies to explore eco-friendly production methods. Technological advancements in storage and distribution have also enhanced efficiency, reduced costs, and improved supply chain logistics.

Contents

Report Content

CHAPTER 1 METHODOLOGY & SCOPE

- 1.1 Market scope & definition
- 1.2 Base estimates & calculations
- 1.3 Forecast calculation
- 1.4 Data sources
 - 1.4.1 Primary
 - 1.4.2 Secondary
 - 1.4.2.1 Paid sources
 - 1.4.2.2 Public sources

CHAPTER 2 EXECUTIVE SUMMARY

- 2.1 Industry synopsis, 2021-2032

CHAPTER 3 INDUSTRY INSIGHTS

- 3.1 Industry ecosystem analysis
 - 3.1.1 Factor affecting the value chain
 - 3.1.2 Profit margin analysis
 - 3.1.3 Disruptions
 - 3.1.4 Future outlook
 - 3.1.5 Manufacturers
 - 3.1.6 Distributors
- 3.2 Supplier landscape
- 3.3 Profit margin analysis
- 3.4 Key news & initiatives
- 3.5 Regulatory landscape
- 3.6 Impact forces
- 3.7 Industry impact forces
 - 3.7.1 Growth drivers
 - 3.7.1.1 Strong growth indicators in pharmaceutical industry
 - 3.7.1.2 Increasing automobile manufacturing worldwide
 - 3.7.1.3 Strong product demand in rubber & plastic manufacturing
 - 3.7.2 Market challenges

- 3.7.2.1 Increasing transportation cost
- 3.8 Regulations & market impact
- 3.9 Porter's analysis
- 3.10 PESTEL analysis

CHAPTER 4 COMPETITIVE LANDSCAPE, 2023

- 4.1 Introduction
- 4.2 Company market share analysis
- 4.3 Competitive positioning matrix
- 4.4 Strategic outlook matrix

CHAPTER 5 MARKET SIZE AND FORECAST, BY TRANSPORTATION, 2021-2032 (USD BILLION) (MILLION LITERS)

- 5.1 Key trends
- 5.2 On-site production
- 5.3 Bulk liquid
- 5.4 Packaged

CHAPTER 6 MARKET SIZE AND FORECAST, BY END USE, 2021-2032 (USD BILLION) (MILLION LITERS)

- 6.1 Key trends
- 6.2 Automotive
- 6.3 Chemicals & pharmaceutical
- 6.4 Rubber & plastic
- 6.5 Food & beverages
- 6.6 Healthcare
- 6.7 Metal fabrication
- 6.8 Oil & gas

CHAPTER 7 MARKET SIZE AND FORECAST, BY REGION, 2021-2032 (USD BILLION) (MILLION LITERS)

- 7.1 Key trends
- 7.2 North America
 - 7.2.1 U.S.
 - 7.2.2 Canada

7.3 Europe

7.3.1 UK

7.3.2 Germany

7.3.3 France

7.3.4 Italy

7.3.5 Spain

7.3.6 Russia

7.4 Asia Pacific

7.4.1 China

7.4.2 India

7.4.3 Japan

7.4.4 South Korea

7.4.5 Australia

7.5 Latin America

7.5.1 Brazil

7.5.2 Mexico

7.6 MEA

7.6.1 South Africa

7.6.2 Saudi Arabia

7.6.3 UAE

CHAPTER 8 COMPANY PROFILES

8.1 Air Products and Chemicals Inc.

8.2 Air Liquide SA

8.3 Emirates Industrial Gas Company LLC

8.4 Gulf Cryo Holding CJSC

8.5 Linde plc

8.6 Messer Group GmbH

8.7 NexAir LLC

8.8 Praxair Inc.

8.9 Southern Industrial Gas Berhad

8.10 Taiyo Nippon Sanso Corporation

I would like to order

Product name: Liquid Nitrogen Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 - 2032

Product link: <https://marketpublishers.com/r/L9ED87AA68B7EN.html>

Price: US\$ 4,850.00 (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/L9ED87AA68B7EN.html>