

Global Helium 3 Supply, Demand and Key Producers, 2023-2029

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Abstracts

The global Helium 3 market size is expected to reach \$ 50 million by 2029, rising at a market growth of 34.8% CAGR during the forecast period (2023-2029).

Global key players of helium 3 include Rosatom, Chemgas, etc. The top two players hold a share about 93%. The largest market is Asia-Pacific, with a share about 55%. In terms of product type, ?99.99% is the largest segment, occupied for a share of about 65%, and in terms of application, Helium 3 Neutron Detector has a share about 30 percent.

Helium 3 is a light, stable isotope of helium with the chemical symbol ${}^3\text{He}$. Its nucleus consists of two protons and one neutron, which are stable isotopes. Its abundance is generally above 99%, is colorless, odorless and stable gas, generally stored in high pressure cylinders.

At present, there are only two sources of helium-3 on the Earth, one source is 'born' on the Earth, but the proportion is small, only about 0.000137%, and has not been exploited. The other source is a by-product of nuclear weapons, formed when tritium occurs radioactive decay, the required process is complex, the technical level is high, and only about 15 kg per year can be used. Since the increase in global terrorist attacks, countries have paid attention to national defense construction, a large number of countries deploy neutron detectors, the demand for helium 3 has been rising. At present, the Earth's existing helium 3 is far from enough to meet the current demand.

As we all know, the extraction of helium 3 is not only a political and diplomatic victory, but also a military and economic victory. With the progress of science and technology, more and more countries are aiming at the moon. The amount found in natural stores

on the Moon is 100 million times higher than it is on Earth, and helium-3, encased in the moon's gray regolith, could become the most precious and contested substance for mankind in the 23rd century. It has become a catalyst for a new wave of lunar colonization, offering the prospect of fusion energy generation to solve Earth's energy problems once and for all. Mining to the moon will become a big trend in the future.

This report studies the global Helium 3 production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Helium 3, and provides market size (US\$ million) and Year-over-Year (YoY) Growth, considering 2022 as the base year. This report explores demand trends and competition, as well as details the characteristics of Helium 3 that contribute to its increasing demand across many markets.

Highlights and key features of the study

Global Helium 3 total production and demand, 2018-2029, (L)

Global Helium 3 total production value, 2018-2029, (USD Million)

Global Helium 3 production by region & country, production, value, CAGR, 2018-2029, (USD Million) & (L)

Global Helium 3 consumption by region & country, CAGR, 2018-2029 & (L)

U.S. VS China: Helium 3 domestic production, consumption, key domestic manufacturers and share

Global Helium 3 production by manufacturer, production, price, value and market share 2018-2023, (USD Million) & (L)

Global Helium 3 production by Purity, production, value, CAGR, 2018-2029, (USD Million) & (L)

Global Helium 3 production by Application production, value, CAGR, 2018-2029, (USD Million) & (L).

This reports profiles key players in the global Helium 3 market based on the following parameters – company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Rosatom, Chemgas and Savannah River Site (SRS), etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World Helium 3 market.

Detailed Segmentation:

Each section contains quantitative market data including market by value (US\$ Millions), volume (production, consumption) & (L) and average price (K US\$/L) by manufacturer, by Purity, and by Application. Data is given for the years 2018-2029 by year with 2022 as the base year, 2023 as the estimate year, and 2024-2029 as the forecast year.

Global Helium 3 Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

Global Helium 3 Market, Segmentation by Purity

?99.99%

?99.99%

Global Helium 3 Market, Segmentation by Application

Helium 3 Neutron Detector

Dilution Chiller

Medical Imaging

Nuclear Magnetic Resonance (Cryogenic Superconductivity)

Nuclear Fusion Research

Others

Companies Profiled:

Rosatom

Chemgas

Savannah River Site (SRS)

Key Questions Answered

1. How big is the global Helium 3 market?
2. What is the demand of the global Helium 3 market?
3. What is the year over year growth of the global Helium 3 market?
4. What is the production and production value of the global Helium 3 market?

5. Who are the key producers in the global Helium 3 market?

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