

Global Vanadium-48 Supply, Demand and Key Producers, 2026-2032

<https://marketpublishers.com/r/GFB30B030915EN.html>

Date: September 2026

Pages: 92

Price: US\$ 4,480.00 (Single User License)

ID: GFB30B030915EN

Abstracts

The global Vanadium-48 market size is expected to reach \$ million by 2032, rising at a market growth of %CAGR during the forecast period (2026-2032).

In 2025, global Vanadium-48 production was approximately 128 grams, with an average global market price of around \$12,000 per gram. Total global production capacity for Vanadium-48 reached approximately 240 grams that year, and the industry's average gross profit margin was about 49%. Vanadium-48 is an artificially produced radioactive isotope of the element vanadium, characterized by an atomic number of 23 and a mass number of 48. It is typically produced via nuclear reactions in particle accelerators—for instance, by bombarding a titanium-48 (^{48}Ti) target with protons (the $^{48}\text{Ti}(p,n)^{48}\text{V}$ reaction). With a half-life of approximately 15.97 days, V-48 decays primarily through positron emission (β^+ decay) into titanium-48 (^{48}Ti), simultaneously releasing high-energy gamma rays; these properties make it highly suitable for use as a tracer in nuclear medicine and for radiometric measurements. Due to its relatively long half-life, detectable positron emission, and significant value in radiolabeling, V-48 is primarily utilized in positron emission tomography (PET) research, radiotracer experiments, nuclear physics studies, and the development of medical imaging technologies. Compared to common short-lived PET isotopes, V-48 offers an extended operational window, facilitating the labeling of complex biomolecules, experimental transport, and long-term animal studies. Currently, V-48 remains a specialized radioisotope with a niche market, serving primarily research institutions, nuclear medicine laboratories, and specialized industrial testing sectors.

The upstream segment of the V-48 industry chain encompasses suppliers of high-purity target materials, manufacturers of particle accelerator equipment, and providers of nuclear reaction systems and radiochemistry laboratory infrastructure. Production

typically requires high-purity titanium-48 isotopic targets and the generation of high-energy proton beams via cyclotrons to drive the nuclear reaction. As titanium-48 is a stable isotope, the target material's isotopic abundance, chemical purity, machinability, and thermal stability directly influence production efficiency and final product quality. Upstream equipment includes medical cyclotrons, high-energy beam systems, target station assemblies, automated irradiation systems, and radioactivity detection instruments. The preparation process demands precise control over proton energy, irradiation duration, target thermal management, and subsequent chemical separation procedures, thereby imposing rigorous technical requirements on the production platform. In addition to equipment requirements, significant barriers to entry in the industry chain include the need for radioactive production licenses, radiation protection systems, and specialized nuclear chemistry personnel. The midstream segment of the industry chain primarily comprises Vanadium-48 production units, nuclear medicine research platforms, radioisotope suppliers, and radiopharmaceutical R&D institutions. Midstream enterprises or research institutes utilize cyclotrons to produce Vanadium-48 via nuclear reactions; subsequently, they employ radiochemical processes—such as ion exchange, extraction, precipitation, and chromatographic separation—to remove impurities and obtain high-purity Vanadium-48 products that meet research and application requirements. Downstream applications of Vanadium-48 primarily span nuclear medicine imaging research, PET tracer technology development, life sciences research, nuclear physics experiments, and certain industrial tracing sectors. Because Vanadium-48 emits positrons and generates detectable gamma rays, it is suitable for PET-related experimental research, enabling scientists to analyze the distribution of biomolecules, metabolic processes, and changes in tissue function. In the fields of life sciences and medical research, Vanadium-48 serves as a radioactive tracer nuclide for studying vanadium metabolism, metal ion transport mechanisms, and the behavior of drugs or compounds within the body. Furthermore, its relatively long half-life allows researchers to conduct long-duration experiments, such as animal model studies, pharmacokinetic evaluations, and complex molecular tracking experiments. Beyond the medical field, Vanadium-48 is also utilized in nuclear physics experiments, materials research, and industrial process tracing. In nuclear science research, it is employed for detector calibration, nuclear reaction experiments, and studies involving radioactivity measurements. Looking ahead, driven by advancements in precision medicine and PET technology, as well as the expanding application of radioactive tracer techniques, Vanadium-48 will continue to see steady demand within the market for research-grade radioisotopes; however, the market as a whole will likely retain characteristics of small scale, high technical barriers, and specialized supply.

With the continuous advancement of precision medicine, molecular imaging

technologies, and nuclear medicine diagnostic and therapeutic models, Vanadium-48—a radioisotope with positron-emitting properties—is increasingly attracting attention for its application value in PET molecular imaging research. While traditional medical imaging relies primarily on anatomical structural changes to assess disease, modern nuclear medicine focuses more on molecular-level changes during disease progression, creating a greater demand for high-performance tracer nuclides and novel PET probes. With a half-life of approximately 15.97 days and detectable positron and gamma-ray emissions, Vanadium-48 offers a longer experimental window compared to certain short-lived nuclides, making it particularly suitable for labeling complex biomolecules, conducting animal model studies, and performing pharmacokinetic analyses. Consequently, the growing demand for cancer research, the exploration of disease mechanisms, and the development of innovative molecular probes has become a key driver for the expanded application of Vanadium-48.

Secondly, sustained investment in radiopharmaceutical R&D and life sciences research provides long-term growth momentum for the Vanadium-48 market. In recent years, the global radiopharmaceutical industry has expanded rapidly, with radioactive tracer technologies finding increasingly broad application in areas such as cancer diagnosis, drug development evaluation, and biological metabolism studies. Thanks to its excellent tracer capabilities, Vanadium-48 can be used to study elemental metabolic processes, chemical reaction pathways, and the migration of substances within biological systems, offering significant potential in basic medical research and preclinical drug development. It offers unique research value—difficult to replicate with traditional nuclides—particularly in the fields of novel PET tracers, metal coordination compounds, and multifunctional molecular probes. Looking ahead, as pharmaceutical companies, universities, and research institutions increase their investment in precision diagnostic technologies, the demand for Vanadium-48 is expected to maintain steady growth.

Thirdly, advancements in cyclotron technology and the refinement of radioisotope production systems have laid the technical foundation for enhancing the supply capacity of Vanadium-48. Vanadium-48 is primarily produced through nuclear reactions in high-energy particle accelerators, a process that demands high-purity target materials, precise particle beam control, optimized irradiation protocols, and advanced radiochemical separation techniques. In recent years, the increasing number of medical cyclotrons, the development of automated radiochemical equipment, and improvements in isotope separation and purification technologies have continuously boosted the production efficiency of specialized radionuclides. At the same time, the development of regional nuclear medicine centers and research facilities is driving the refinement of supply networks for short-lived radionuclides, thereby enhancing the availability of

Vanadium-48. Looking ahead, optimizing production technologies and improving equipment utilization rates will be key strategies for reducing production costs and expanding the scope of application.

Report Scope

This report studies the global Vanadium-48 production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Vanadium-48 and provides market size (US\$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of Vanadium-48 that contribute to its increasing demand across many markets.

Highlights and key features of the study

Global Vanadium-48 total production and demand, 2021-2032, (Gram)

Global Vanadium-48 total production value, 2021-2032, (USD Million)

Global Vanadium-48 production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (Gram), (based on production site)

Global Vanadium-48 consumption by region & country, CAGR, 2021-2032 & (Gram)

U.S. VS China: Vanadium-48 domestic production, consumption, key domestic manufacturers and share

Global Vanadium-48 production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (Gram)

Global Vanadium-48 production by Type, production, value, CAGR, 2021-2032, (USD Million) & (Gram)

Global Vanadium-48 production by Application, production, value, CAGR, 2021-2032, (USD Million) & (Gram)

This report profiles key players in the global Vanadium-48 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 NIDC(DOE IP), Stanford Advanced Materials, Rosatom, 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 Vanadium-48 market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US\$ Millions), volume (production, consumption) & (Gram) and average price (US\$/g) by manufacturer, by Type, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global Vanadium-48 Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

Global Vanadium-48 Market, Segmentation by Type:

Radionuclidic Purity: 98%-99%

Radionuclidic Purity: >99%

Global Vanadium-48 Market, Segmentation by Chemical Form:

Vanadium-48 Chloride

Vanadium-48 Labeled Compounds

Global Vanadium-48 Market, Segmentation by Purity Grade:

Research-grade Vanadium-48

Clinical-grade Vanadium-48

Global Vanadium-48 Market, Segmentation by Production Method:

Cyclotron

Nuclear Facility Production

Global Vanadium-48 Market, Segmentation by Application:

Nuclear Medicine

Scientific Research

Companies Profiled:

NIDC(DOE IP)

Stanford Advanced Materials

Rosatom

Key Questions Answered:

1. How big is the global Vanadium-48 market?
2. What is the demand of the global Vanadium-48 market?
3. What is the year over year growth of the global Vanadium-48 market?
4. What is the production and production value of the global Vanadium-48 market?
5. Who are the key producers in the global Vanadium-48 market?
6. What are the growth factors driving the market demand?

Contents

1 SUPPLY SUMMARY

- 1.1 Vanadium-48 Introduction
- 1.2 World Vanadium-48 Supply & Forecast
 - 1.2.1 World Vanadium-48 Production Value (2021 & 2025 & 2032)
 - 1.2.2 World Vanadium-48 Production (2021-2032)
 - 1.2.3 World Vanadium-48 Pricing Trends (2021-2032)
- 1.3 World Vanadium-48 Production by Region (Based on Production Site)
 - 1.3.1 World Vanadium-48 Production Value by Region (2021-2032)
 - 1.3.2 World Vanadium-48 Production by Region (2021-2032)
 - 1.3.3 World Vanadium-48 Average Price by Region (2021-2032)
 - 1.3.4 North America Vanadium-48 Production (2021-2032)
 - 1.3.5 Europe Vanadium-48 Production (2021-2032)
 - 1.3.6 China Vanadium-48 Production (2021-2032)
 - 1.3.7 Japan Vanadium-48 Production (2021-2032)
- 1.4 Market Drivers, Restraints and Trends
 - 1.4.1 Vanadium-48 Market Drivers
 - 1.4.2 Factors Affecting Demand
 - 1.4.3 Vanadium-48 Major Market Trends

2 DEMAND SUMMARY

- 2.1 World Vanadium-48 Demand (2021-2032)
- 2.2 World Vanadium-48 Consumption by Region
 - 2.2.1 World Vanadium-48 Consumption by Region (2021-2026)
 - 2.2.2 World Vanadium-48 Consumption Forecast by Region (2027-2032)
- 2.3 United States Vanadium-48 Consumption (2021-2032)
- 2.4 China Vanadium-48 Consumption (2021-2032)
- 2.5 Europe Vanadium-48 Consumption (2021-2032)
- 2.6 Japan Vanadium-48 Consumption (2021-2032)
- 2.7 South Korea Vanadium-48 Consumption (2021-2032)
- 2.8 ASEAN Vanadium-48 Consumption (2021-2032)
- 2.9 India Vanadium-48 Consumption (2021-2032)

3 WORLD MANUFACTURERS COMPETITIVE ANALYSIS

- 3.1 World Vanadium-48 Production Value by Manufacturer (2021-2026)
- 3.2 World Vanadium-48 Production by Manufacturer (2021-2026)
- 3.3 World Vanadium-48 Average Price by Manufacturer (2021-2026)
- 3.4 Vanadium-48 Company Evaluation Quadrant

3.5 Industry Rank and Concentration Rate (CR)

3.5.1 Global Vanadium-48 Industry Rank of Major Manufacturers

3.5.2 Global Concentration Ratios (CR4) for Vanadium-48 in 2025

3.5.3 Global Concentration Ratios (CR8) for Vanadium-48 in 2025

3.6 Vanadium-48 Market: Overall Company Footprint Analysis

3.6.1 Vanadium-48 Market: Region Footprint

3.6.2 Vanadium-48 Market: Company Product Type Footprint

3.6.3 Vanadium-48 Market: Company Product Application Footprint

3.7 Competitive Environment

3.7.1 Historical Structure of the Industry

3.7.2 Barriers of Market Entry

3.7.3 Factors of Competition

3.8 New Entrant and Capacity Expansion Plans

3.9 Mergers, Acquisition, Agreements, and Collaborations

4 UNITED STATES VS CHINA VS REST OF THE WORLD

4.1 United States VS China: Vanadium-48 Production Value Comparison

4.1.1 United States VS China: Vanadium-48 Production Value Comparison (2021 & 2025 & 2032)

4.1.2 United States VS China: Vanadium-48 Production Value Market Share Comparison (2021 & 2025 & 2032)

4.2 United States VS China: Vanadium-48 Production Comparison

4.2.1 United States VS China: Vanadium-48 Production Comparison (2021 & 2025 & 2032)

4.2.2 United States VS China: Vanadium-48 Production Market Share Comparison (2021 & 2025 & 2032)

4.3 United States VS China: Vanadium-48 Consumption Comparison

4.3.1 United States VS China: Vanadium-48 Consumption Comparison (2021 & 2025 & 2032)

4.3.2 United States VS China: Vanadium-48 Consumption Market Share Comparison (2021 & 2025 & 2032)

4.4 United States Based Vanadium-48 Manufacturers and Market Share, 2021-2026

4.4.1 United States Based Vanadium-48 Manufacturers, Headquarters and Production Site (States, Country)

4.4.2 United States Based Manufacturers Vanadium-48 Production Value (2021-2026)

4.4.3 United States Based Manufacturers Vanadium-48 Production (2021-2026)

4.5 China Based Vanadium-48 Manufacturers and Market Share

4.5.1 China Based Vanadium-48 Manufacturers, Headquarters and Production Site (Province, Country)

- 4.5.2 China Based Manufacturers Vanadium-48 Production Value (2021-2026)
- 4.5.3 China Based Manufacturers Vanadium-48 Production (2021-2026)
- 4.6 Rest of World Based Vanadium-48 Manufacturers and Market Share, 2021-2026
 - 4.6.1 Rest of World Based Vanadium-48 Manufacturers, Headquarters and Production Site (State, Country)
 - 4.6.2 Rest of World Based Manufacturers Vanadium-48 Production Value (2021-2026)
 - 4.6.3 Rest of World Based Manufacturers Vanadium-48 Production (2021-2026)

5 MARKET ANALYSIS BY TYPE

- 5.1 World Vanadium-48 Market Size Overview by Type: 2021 VS 2025 VS 2032
- 5.2 Segment Introduction by Type
 - 5.2.1 Radionuclidic Purity: 98%-99%
 - 5.2.2 Radionuclidic Purity: >99%
- 5.3 Market Segment by Type
 - 5.3.1 World Vanadium-48 Production by Type (2021-2032)
 - 5.3.2 World Vanadium-48 Production Value by Type (2021-2032)
 - 5.3.3 World Vanadium-48 Average Price by Type (2021-2032)

6 MARKET ANALYSIS BY CHEMICAL FORM

- 6.1 World Vanadium-48 Market Size Overview by Chemical Form: 2021 VS 2025 VS 2032
- 6.2 Segment Introduction by Chemical Form
 - 6.2.1 Vanadium-48 Chloride
 - 6.2.2 Vanadium-48 Labeled Compounds
- 6.3 Market Segment by Chemical Form
 - 6.3.1 World Vanadium-48 Production by Chemical Form (2021-2032)
 - 6.3.2 World Vanadium-48 Production Value by Chemical Form (2021-2032)
 - 6.3.3 World Vanadium-48 Average Price by Chemical Form (2021-2032)

7 MARKET ANALYSIS BY PURITY GRADE

- 7.1 World Vanadium-48 Market Size Overview by Purity Grade: 2021 VS 2025 VS 2032
- 7.2 Segment Introduction by Purity Grade
 - 7.2.1 Research-grade Vanadium-48
 - 7.2.2 Clinical-grade Vanadium-48
- 7.3 Market Segment by Purity Grade
 - 7.3.1 World Vanadium-48 Production by Purity Grade (2021-2032)
 - 7.3.2 World Vanadium-48 Production Value by Purity Grade (2021-2032)
 - 7.3.3 World Vanadium-48 Average Price by Purity Grade (2021-2032)

8 MARKET ANALYSIS BY PRODUCTION METHOD

8.1 World Vanadium-48 Market Size Overview by Production Method: 2021 VS 2025 VS 2032

8.2 Segment Introduction by Production Method

8.2.1 Cyclotron

8.2.2 Nuclear Facility Production

8.3 Market Segment by Production Method

8.3.1 World Vanadium-48 Production by Production Method (2021-2032)

8.3.2 World Vanadium-48 Production Value by Production Method (2021-2032)

8.3.3 World Vanadium-48 Average Price by Production Method (2021-2032)

9 MARKET ANALYSIS BY APPLICATION

9.1 World Vanadium-48 Market Size Overview by Application: 2021 VS 2025 VS 2032

9.2 Segment Introduction by Application

9.2.1 Nuclear Medicine

9.2.2 Scientific Research

9.3 Market Segment by Application

9.3.1 World Vanadium-48 Production by Application (2021-2032)

9.3.2 World Vanadium-48 Production Value by Application (2021-2032)

9.3.3 World Vanadium-48 Average Price by Application (2021-2032)

10 COMPANY PROFILES

10.1 NIDC(DOE IP)

10.1.1 NIDC(DOE IP) Details

10.1.2 NIDC(DOE IP) Major Business

10.1.3 NIDC(DOE IP) Vanadium-48 Product and Services

10.1.4 NIDC(DOE IP) Vanadium-48 Production, Price, Value, Gross Margin and Market Share (2021-2026)

10.1.5 NIDC(DOE IP) Recent Developments/Updates

10.1.6 NIDC(DOE IP) Competitive Strengths & Weaknesses

10.2 Stanford Advanced Materials

10.2.1 Stanford Advanced Materials Details

10.2.2 Stanford Advanced Materials Major Business

10.2.3 Stanford Advanced Materials Vanadium-48 Product and Services

10.2.4 Stanford Advanced Materials Vanadium-48 Production, Price, Value, Gross Margin and Market Share (2021-2026)

10.2.5 Stanford Advanced Materials Recent Developments/Updates

10.2.6 Stanford Advanced Materials Competitive Strengths & Weaknesses

10.3 Rosatom

- 10.3.1 Rosatom Details
- 10.3.2 Rosatom Major Business
- 10.3.3 Rosatom Vanadium-48 Product and Services
- 10.3.4 Rosatom Vanadium-48 Production, Price, Value, Gross Margin and Market Share (2021-2026)
- 10.3.5 Rosatom Recent Developments/Updates
- 10.3.6 Rosatom Competitive Strengths & Weaknesses

11 INDUSTRY CHAIN ANALYSIS

- 11.1 Vanadium-48 Industry Chain
- 11.2 Vanadium-48 Upstream Analysis
 - 11.2.1 Vanadium-48 Core Raw Materials
 - 11.2.2 Main Manufacturers of Vanadium-48 Core Raw Materials
- 11.3 Midstream Analysis
- 11.4 Downstream Analysis
- 11.5 Vanadium-48 Production Mode
- 11.6 Vanadium-48 Procurement Model
- 11.7 Vanadium-48 Industry Sales Model and Sales Channels
 - 11.7.1 Vanadium-48 Sales Model
 - 11.7.2 Vanadium-48 Typical Distributors

12 RESEARCH FINDINGS AND CONCLUSION

13 APPENDIX

- 13.1 Methodology
- 13.2 Research Process and Data Source
- 13.3 Disclaimer

List Of Tables

LIST OF TABLES

Table 1. World Vanadium-48 Production Value by Region (2021, 2025 and 2032) & (USD Million)

Table 2. World Vanadium-48 Production Value by Region (2021-2026) & (USD Million)

Table 3. World Vanadium-48 Production Value by Region (2027-2032) & (USD Million)

Table 4. World Vanadium-48 Production Value Market Share by Region (2021-2026)

Table 5. World Vanadium-48 Production Value Market Share by Region (2027-2032)

Table 6. World Vanadium-48 Production by Region (2021-2026) & (Gram)

Table 7. World Vanadium-48 Production by Region (2027-2032) & (Gram)

Table 8. World Vanadium-48 Production Market Share by Region (2021-2026)

Table 9. World Vanadium-48 Production Market Share by Region (2027-2032)

Table 10. World Vanadium-48 Average Price by Region (2021-2026) & (US\$/g)

Table 11. World Vanadium-48 Average Price by Region (2027-2032) & (US\$/g)

Table 12. Vanadium-48 Major Market Trends

Table 13. World Vanadium-48 Consumption Growth Rate Forecast by Region (2021 & 2025 & 2032) & (Gram)

Table 14. World Vanadium-48 Consumption by Region (2021-2026) & (Gram)

Table 15. World Vanadium-48 Consumption Forecast by Region (2027-2032) & (Gram)

Table 16. World Vanadium-48 Production Value by Manufacturer (2021-2026) & (USD Million)

Table 17. Production Value Market Share of Key Vanadium-48 Producers in 2025

Table 18. World Vanadium-48 Production by Manufacturer (2021-2026) & (Gram)

Table 19. Production Market Share of Key Vanadium-48 Producers in 2025

Table 20. World Vanadium-48 Average Price by Manufacturer (2021-2026) & (US\$/g)

Table 21. Global Vanadium-48 Company Evaluation Quadrant

Table 22. World Vanadium-48 Industry Rank of Major Manufacturers, Based on Production Value in 2025

Table 23. Head Office and Vanadium-48 Production Site of Key Manufacturer

Table 24. Vanadium-48 Market: Company Product Type Footprint

Table 25. Vanadium-48 Market: Company Product Application Footprint

Table 26. Vanadium-48 Competitive Factors

Table 27. Vanadium-48 New Entrant and Capacity Expansion Plans

Table 28. Vanadium-48 Mergers & Acquisitions Activity

Table 29. United States VS China Vanadium-48 Production Value Comparison, (2021 & 2025 & 2032) & (USD Million)

Table 30. United States VS China Vanadium-48 Production Comparison, (2021 & 2025

& 2032) & (Gram)

Table 31. United States VS China Vanadium-48 Consumption Comparison, (2021 & 2025 & 2032) & (Gram)

Table 32. United States Based Vanadium-48 Manufacturers, Headquarters and Production Site (States, Country)

Table 33. United States Based Manufacturers Vanadium-48 Production Value, (2021-2026) & (USD Million)

Table 34. United States Based Manufacturers Vanadium-48 Production Value Market Share (2021-2026)

Table 35. United States Based Manufacturers Vanadium-48 Production (2021-2026) & (Gram)

Table 36. United States Based Manufacturers Vanadium-48 Production Market Share (2021-2026)

Table 37. China Based Vanadium-48 Manufacturers, Headquarters and Production Site (Province, Country)

Table 38. China Based Manufacturers Vanadium-48 Production Value, (2021-2026) & (USD Million)

Table 39. China Based Manufacturers Vanadium-48 Production Value Market Share (2021-2026)

Table 40. China Based Manufacturers Vanadium-48 Production, (2021-2026) & (Gram)

Table 41. China Based Manufacturers Vanadium-48 Production Market Share (2021-2026)

Table 42. Rest of World Based Vanadium-48 Manufacturers, Headquarters and Production Site (State, Country)

Table 43. Rest of World Based Manufacturers Vanadium-48 Production Value, (2021-2026) & (USD Million)

Table 44. Rest of World Based Manufacturers Vanadium-48 Production Value Market Share (2021-2026)

Table 45. Rest of World Based Manufacturers Vanadium-48 Production, (2021-2026) & (Gram)

Table 46. Rest of World Based Manufacturers Vanadium-48 Production Market Share (2021-2026)

Table 47. World Vanadium-48 Production Value by Type, (USD Million), 2021 & 2025 & 2032

Table 48. World Vanadium-48 Production by Type (2021-2026) & (Gram)

Table 49. World Vanadium-48 Production by Type (2027-2032) & (Gram)

Table 50. World Vanadium-48 Production Value by Type (2021-2026) & (USD Million)

Table 51. World Vanadium-48 Production Value by Type (2027-2032) & (USD Million)

Table 52. World Vanadium-48 Average Price by Type (2021-2026) & (US\$/g)

Table 53. World Vanadium-48 Average Price by Type (2027-2032) & (US\$/g)
Table 54. World Vanadium-48 Production Value by Chemical Form, (USD Million), 2021 & 2025 & 2032
Table 55. World Vanadium-48 Production by Chemical Form (2021-2026) & (Gram)
Table 56. World Vanadium-48 Production by Chemical Form (2027-2032) & (Gram)
Table 57. World Vanadium-48 Production Value by Chemical Form (2021-2026) & (USD Million)
Table 58. World Vanadium-48 Production Value by Chemical Form (2027-2032) & (USD Million)
Table 59. World Vanadium-48 Average Price by Chemical Form (2021-2026) & (US\$/g)
Table 60. World Vanadium-48 Average Price by Chemical Form (2027-2032) & (US\$/g)
Table 61. World Vanadium-48 Production Value by Purity Grade, (USD Million), 2021 & 2025 & 2032
Table 62. World Vanadium-48 Production by Purity Grade (2021-2026) & (Gram)
Table 63. World Vanadium-48 Production by Purity Grade (2027-2032) & (Gram)
Table 64. World Vanadium-48 Production Value by Purity Grade (2021-2026) & (USD Million)
Table 65. World Vanadium-48 Production Value by Purity Grade (2027-2032) & (USD Million)
Table 66. World Vanadium-48 Average Price by Purity Grade (2021-2026) & (US\$/g)
Table 67. World Vanadium-48 Average Price by Purity Grade (2027-2032) & (US\$/g)
Table 68. World Vanadium-48 Production Value by Production Method, (USD Million), 2021 & 2025 & 2032
Table 69. World Vanadium-48 Production by Production Method (2021-2026) & (Gram)
Table 70. World Vanadium-48 Production by Production Method (2027-2032) & (Gram)
Table 71. World Vanadium-48 Production Value by Production Method (2021-2026) & (USD Million)
Table 72. World Vanadium-48 Production Value by Production Method (2027-2032) & (USD Million)
Table 73. World Vanadium-48 Average Price by Production Method (2021-2026) & (US\$/g)
Table 74. World Vanadium-48 Average Price by Production Method (2027-2032) & (US\$/g)
Table 75. World Vanadium-48 Production Value by Application, (USD Million), 2021 & 2025 & 2032
Table 76. World Vanadium-48 Production by Application (2021-2026) & (Gram)
Table 77. World Vanadium-48 Production by Application (2027-2032) & (Gram)
Table 78. World Vanadium-48 Production Value by Application (2021-2026) & (USD Million)

Table 79. World Vanadium-48 Production Value by Application (2027-2032) & (USD Million)

Table 80. World Vanadium-48 Average Price by Application (2021-2026) & (US\$/g)

Table 81. World Vanadium-48 Average Price by Application (2027-2032) & (US\$/g)

Table 82. NIDC(DOE IP) Basic Information, Manufacturing Base and Competitors

Table 83. NIDC(DOE IP) Major Business

Table 84. NIDC(DOE IP) Vanadium-48 Product and Services

Table 85. NIDC(DOE IP) Vanadium-48 Production (Gram), Price (US\$/g), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 86. NIDC(DOE IP) Recent Developments/Updates

Table 87. NIDC(DOE IP) Competitive Strengths & Weaknesses

Table 88. Stanford Advanced Materials Basic Information, Manufacturing Base and Competitors

Table 89. Stanford Advanced Materials Major Business

Table 90. Stanford Advanced Materials Vanadium-48 Product and Services

Table 91. Stanford Advanced Materials Vanadium-48 Production (Gram), Price (US\$/g), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 92. Stanford Advanced Materials Recent Developments/Updates

Table 93. Stanford Advanced Materials Competitive Strengths & Weaknesses

Table 94. Rosatom Basic Information, Manufacturing Base and Competitors

Table 95. Rosatom Major Business

Table 96. Rosatom Vanadium-48 Product and Services

Table 97. Rosatom Vanadium-48 Production (Gram), Price (US\$/g), Production Value (USD Million), Gross Margin and Market Share (2021-2026)

Table 98. Rosatom Recent Developments/Updates

Table 99. Rosatom Competitive Strengths & Weaknesses

Table 100. Global Key Players of Vanadium-48 Upstream (Raw Materials)

Table 101. Global Vanadium-48 Typical Customers

Table 102. Vanadium-48 Typical Distributors

List Of Figures

LIST OF FIGURES

Figure 1. Vanadium-48 Picture

Figure 2. World Vanadium-48 Production Value: 2021 & 2025 & 2032, (USD Million)

Figure 3. World Vanadium-48 Production Value and Forecast (2021-2032) & (USD Million)

Figure 4. World Vanadium-48 Production (2021-2032) & (Gram)

Figure 5. World Vanadium-48 Average Price (2021-2032) & (US\$/g)

Figure 6. World Vanadium-48 Production Value Market Share by Region (2021-2032)

Figure 7. World Vanadium-48 Production Market Share by Region (2021-2032)

Figure 8. North America Vanadium-48 Production (2021-2032) & (Gram)

Figure 9. Europe Vanadium-48 Production (2021-2032) & (Gram)

Figure 10. China Vanadium-48 Production (2021-2032) & (Gram)

Figure 11. Japan Vanadium-48 Production (2021-2032) & (Gram)

Figure 12. Vanadium-48 Market Drivers

Figure 13. Factors Affecting Demand

Figure 14. World Vanadium-48 Consumption (2021-2032) & (Gram)

Figure 15. World Vanadium-48 Consumption Market Share by Region (2021-2032)

Figure 16. United States Vanadium-48 Consumption (2021-2032) & (Gram)

Figure 17. China Vanadium-48 Consumption (2021-2032) & (Gram)

Figure 18. Europe Vanadium-48 Consumption (2021-2032) & (Gram)

Figure 19. Japan Vanadium-48 Consumption (2021-2032) & (Gram)

Figure 20. South Korea Vanadium-48 Consumption (2021-2032) & (Gram)

Figure 21. ASEAN Vanadium-48 Consumption (2021-2032) & (Gram)

Figure 22. India Vanadium-48 Consumption (2021-2032) & (Gram)

Figure 23. Producer Shipments of Vanadium-48 by Manufacturer Revenue (\$MM) and Market Share (%): 2025

Figure 24. Global Four-firm Concentration Ratios (CR4) for Vanadium-48 Markets in 2025

Figure 25. Global Four-firm Concentration Ratios (CR8) for Vanadium-48 Markets in 2025

Figure 26. United States VS China: Vanadium-48 Production Value Market Share Comparison (2021 & 2025 & 2032)

Figure 27. United States VS China: Vanadium-48 Production Market Share Comparison (2021 & 2025 & 2032)

Figure 28. United States VS China: Vanadium-48 Consumption Market Share Comparison (2021 & 2025 & 2032)

Figure 29. United States Based Manufacturers Vanadium-48 Production Market Share 2025

Figure 30. China Based Manufacturers Vanadium-48 Production Market Share 2025

Figure 31. Rest of World Based Manufacturers Vanadium-48 Production Market Share 2025

Figure 32. World Vanadium-48 Production Value by Type, (USD Million), 2021 & 2025 & 2032

Figure 33. World Vanadium-48 Production Value Market Share by Type in 2025

Figure 34. Radionuclidic Purity: 98%-99%

Figure 35. Radionuclidic Purity: >99%

Figure 36. World Vanadium-48 Production Market Share by Type (2021-2032)

Figure 37. World Vanadium-48 Production Value Market Share by Type (2021-2032)

Figure 38. World Vanadium-48 Average Price by Type (2021-2032) & (US\$/g)

Figure 39. World Vanadium-48 Production Value by Chemical Form, (USD Million), 2021 & 2025 & 2032

Figure 40. World Vanadium-48 Production Value Market Share by Chemical Form in 2025

Figure 41. Vanadium-48 Chloride

Figure 42. Vanadium-48 Labeled Compounds

Figure 43. World Vanadium-48 Production Market Share by Chemical Form (2021-2032)

Figure 44. World Vanadium-48 Production Value Market Share by Chemical Form (2021-2032)

Figure 45. World Vanadium-48 Average Price by Chemical Form (2021-2032) & (US\$/g)

Figure 46. World Vanadium-48 Production Value by Purity Grade, (USD Million), 2021 & 2025 & 2032

Figure 47. World Vanadium-48 Production Value Market Share by Purity Grade in 2025

Figure 48. Research-grade Vanadium-48

Figure 49. Clinical-grade Vanadium-48

Figure 50. World Vanadium-48 Production Market Share by Purity Grade (2021-2032)

Figure 51. World Vanadium-48 Production Value Market Share by Purity Grade (2021-2032)

Figure 52. World Vanadium-48 Average Price by Purity Grade (2021-2032) & (US\$/g)

Figure 53. World Vanadium-48 Production Value by Production Method, (USD Million), 2021 & 2025 & 2032

Figure 54. World Vanadium-48 Production Value Market Share by Production Method in 2025

Figure 55. Cyclotron

Figure 56. Nuclear Facility Production

Figure 57. World Vanadium-48 Production Market Share by Production Method (2021-2032)

Figure 58. World Vanadium-48 Production Value Market Share by Production Method (2021-2032)

Figure 59. World Vanadium-48 Average Price by Production Method (2021-2032) & (US\$/g)

Figure 60. World Vanadium-48 Production Value by Application, (USD Million), 2021 & 2025 & 2032

Figure 61. World Vanadium-48 Production Value Market Share by Application in 2025

Figure 62. Nuclear Medicine

Figure 63. Scientific Research

Figure 64. World Vanadium-48 Production Market Share by Application (2021-2032)

Figure 65. World Vanadium-48 Production Value Market Share by Application (2021-2032)

Figure 66. World Vanadium-48 Average Price by Application (2021-2032) & (US\$/g)

Figure 67. Vanadium-48 Industry Chain

Figure 68. Vanadium-48 Procurement Model

Figure 69. Vanadium-48 Sales Model

Figure 70. Vanadium-48 Sales Channels, Direct Sales, and Distribution

Figure 71. Methodology

Figure 72. Research Process and Data Source

I would like to order

Product name: Global Vanadium-48 Supply, Demand and Key Producers, 2026-2032

Product link: <https://marketpublishers.com/r/GFB30B030915EN.html>

Price: US\$ 4,480.00 (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/GFB30B030915EN.html>