

Global Ortho-Para Hydrogen Conversion Catalyst Supply, Demand and Key Producers, 2023-2029

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Abstracts

The global Ortho-Para Hydrogen Conversion Catalyst market size is expected to reach \$ million by 2029, rising at a market growth of % CAGR during the forecast period (2023-2029).

The hydrogen energy industry is a rapidly evolving sector that focuses on the production, storage, and utilization of hydrogen as a clean and versatile energy carrier. Hydrogen is considered a promising solution for decarbonizing various sectors and achieving a transition to a low-carbon economy.

Ortho-para hydrogen conversion catalysts are substances or materials that facilitate the interconversion of ortho-hydrogen and para-hydrogen. Ortho-hydrogen and para-hydrogen are two different spin isomers of molecular hydrogen (H₂).

In ortho-hydrogen, the two hydrogen nuclei have parallel spins, while in para-hydrogen, the spins are antiparallel. The conversion between these two isomers is an important process in various applications, such as hydrogen storage, nuclear magnetic resonance (NMR) spectroscopy, and low-temperature chemical reactions.

Ortho-para hydrogen conversion catalysts enable the manipulation and control of hydrogen isomers, allowing for improved efficiency, selectivity, and performance in various scientific, industrial, and technological processes where the properties of ortho- and para-hydrogen are of significance.

This report studies the global Ortho-Para Hydrogen Conversion Catalyst production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Ortho-Para Hydrogen Conversion Catalyst, 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 Ortho-Para Hydrogen Conversion Catalyst that contribute to its increasing demand across many markets.

Highlights and key features of the study

Global Ortho-Para Hydrogen Conversion Catalyst total production and demand, 2018-2029, (Tons)

Global Ortho-Para Hydrogen Conversion Catalyst total production value, 2018-2029, (USD Million)

Global Ortho-Para Hydrogen Conversion Catalyst production by region & country, production, value, CAGR, 2018-2029, (USD Million) & (Tons)

Global Ortho-Para Hydrogen Conversion Catalyst consumption by region & country, CAGR, 2018-2029 & (Tons)

U.S. VS China: Ortho-Para Hydrogen Conversion Catalyst domestic production, consumption, key domestic manufacturers and share

Global Ortho-Para Hydrogen Conversion Catalyst production by manufacturer, production, price, value and market share 2018-2023, (USD Million) & (Tons)

Global Ortho-Para Hydrogen Conversion Catalyst production by Type, production, value, CAGR, 2018-2029, (USD Million) & (Tons)

Global Ortho-Para Hydrogen Conversion Catalyst production by Application production, value, CAGR, 2018-2029, (USD Million) & (Tons).

This reports profiles key players in the global Ortho-Para Hydrogen Conversion Catalyst 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 Sigma-Aldrich/Merck, Johnson Matthey, BASF, Thermo Fisher Scientific, Clariant, Umicore, Haldor Topsoe, Evonik Industries and Grace Catalysts Technologies, etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals, COVID-19 and Russia-Ukraine War Influence.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World Ortho-Para Hydrogen Conversion Catalyst market.

Detailed Segmentation:

Each section contains quantitative market data including market by value (US\$ Millions), volume (production, consumption) & (Tons) and average price (US\$/Ton) by manufacturer, by Type, 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 Ortho-Para Hydrogen Conversion Catalyst Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

Global Ortho-Para Hydrogen Conversion Catalyst Market, Segmentation by Type

Nickel Catalysts

Metal Oxide Catalysts

Palladium Catalysts

Ruthenium Catalysts

Platinum Catalysts

Global Ortho-Para Hydrogen Conversion Catalyst Market, Segmentation by Application

Hydrogen Storage

Nuclear Magnetic Resonance (NMR) Spectroscopy

Low-Temperature Chemical Reactions

Others

Companies Profiled:

Sigma-Aldrich/Merck

Johnson Matthey

BASF

Thermo Fisher Scientific

Clariant

Umicore

Haldor Topsoe

Evonik Industries

Grace Catalysts Technologies

Strem Chemicals

JGC Catalysts and Chemicals

Molecular Products

Axens

Shanghai Houdry Catalyst Technology

Key Questions Answered

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

Contents

1 SUPPLY SUMMARY

- 1.1 Ortho-Para Hydrogen Conversion Catalyst Introduction
- 1.2 World Ortho-Para Hydrogen Conversion Catalyst Supply & Forecast
 - 1.2.1 World Ortho-Para Hydrogen Conversion Catalyst Production Value (2018 & 2022 & 2029)
 - 1.2.2 World Ortho-Para Hydrogen Conversion Catalyst Production (2018-2029)
 - 1.2.3 World Ortho-Para Hydrogen Conversion Catalyst Pricing Trends (2018-2029)
- 1.3 World Ortho-Para Hydrogen Conversion Catalyst Production by Region (Based on Production Site)
 - 1.3.1 World Ortho-Para Hydrogen Conversion Catalyst Production Value by Region (2018-2029)
 - 1.3.2 World Ortho-Para Hydrogen Conversion Catalyst Production by Region (2018-2029)
 - 1.3.3 World Ortho-Para Hydrogen Conversion Catalyst Average Price by Region (2018-2029)
 - 1.3.4 North America Ortho-Para Hydrogen Conversion Catalyst Production (2018-2029)
 - 1.3.5 Europe Ortho-Para Hydrogen Conversion Catalyst Production (2018-2029)
 - 1.3.6 China Ortho-Para Hydrogen Conversion Catalyst Production (2018-2029)
 - 1.3.7 Japan Ortho-Para Hydrogen Conversion Catalyst Production (2018-2029)
- 1.4 Market Drivers, Restraints and Trends
 - 1.4.1 Ortho-Para Hydrogen Conversion Catalyst Market Drivers
 - 1.4.2 Factors Affecting Demand
 - 1.4.3 Ortho-Para Hydrogen Conversion Catalyst Major Market Trends
- 1.5 Influence of COVID-19 and Russia-Ukraine War
 - 1.5.1 Influence of COVID-19
 - 1.5.2 Influence of Russia-Ukraine War

2 DEMAND SUMMARY

- 2.1 World Ortho-Para Hydrogen Conversion Catalyst Demand (2018-2029)
- 2.2 World Ortho-Para Hydrogen Conversion Catalyst Consumption by Region
 - 2.2.1 World Ortho-Para Hydrogen Conversion Catalyst Consumption by Region (2018-2023)
 - 2.2.2 World Ortho-Para Hydrogen Conversion Catalyst Consumption Forecast by Region (2024-2029)

- 2.3 United States Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029)
- 2.4 China Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029)
- 2.5 Europe Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029)
- 2.6 Japan Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029)
- 2.7 South Korea Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029)
- 2.8 ASEAN Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029)
- 2.9 India Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029)

3 WORLD ORTHO-PARA HYDROGEN CONVERSION CATALYST MANUFACTURERS COMPETITIVE ANALYSIS

- 3.1 World Ortho-Para Hydrogen Conversion Catalyst Production Value by Manufacturer (2018-2023)
- 3.2 World Ortho-Para Hydrogen Conversion Catalyst Production by Manufacturer (2018-2023)
- 3.3 World Ortho-Para Hydrogen Conversion Catalyst Average Price by Manufacturer (2018-2023)
- 3.4 Ortho-Para Hydrogen Conversion Catalyst Company Evaluation Quadrant
- 3.5 Industry Rank and Concentration Rate (CR)
 - 3.5.1 Global Ortho-Para Hydrogen Conversion Catalyst Industry Rank of Major Manufacturers
 - 3.5.2 Global Concentration Ratios (CR4) for Ortho-Para Hydrogen Conversion Catalyst in 2022
 - 3.5.3 Global Concentration Ratios (CR8) for Ortho-Para Hydrogen Conversion Catalyst in 2022
- 3.6 Ortho-Para Hydrogen Conversion Catalyst Market: Overall Company Footprint Analysis
 - 3.6.1 Ortho-Para Hydrogen Conversion Catalyst Market: Region Footprint
 - 3.6.2 Ortho-Para Hydrogen Conversion Catalyst Market: Company Product Type Footprint
 - 3.6.3 Ortho-Para Hydrogen Conversion Catalyst 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: Ortho-Para Hydrogen Conversion Catalyst Production Value Comparison

4.1.1 United States VS China: Ortho-Para Hydrogen Conversion Catalyst Production Value Comparison (2018 & 2022 & 2029)

4.1.2 United States VS China: Ortho-Para Hydrogen Conversion Catalyst Production Value Market Share Comparison (2018 & 2022 & 2029)

4.2 United States VS China: Ortho-Para Hydrogen Conversion Catalyst Production Comparison

4.2.1 United States VS China: Ortho-Para Hydrogen Conversion Catalyst Production Comparison (2018 & 2022 & 2029)

4.2.2 United States VS China: Ortho-Para Hydrogen Conversion Catalyst Production Market Share Comparison (2018 & 2022 & 2029)

4.3 United States VS China: Ortho-Para Hydrogen Conversion Catalyst Consumption Comparison

4.3.1 United States VS China: Ortho-Para Hydrogen Conversion Catalyst Consumption Comparison (2018 & 2022 & 2029)

4.3.2 United States VS China: Ortho-Para Hydrogen Conversion Catalyst Consumption Market Share Comparison (2018 & 2022 & 2029)

4.4 United States Based Ortho-Para Hydrogen Conversion Catalyst Manufacturers and Market Share, 2018-2023

4.4.1 United States Based Ortho-Para Hydrogen Conversion Catalyst Manufacturers, Headquarters and Production Site (States, Country)

4.4.2 United States Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production Value (2018-2023)

4.4.3 United States Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production (2018-2023)

4.5 China Based Ortho-Para Hydrogen Conversion Catalyst Manufacturers and Market Share

4.5.1 China Based Ortho-Para Hydrogen Conversion Catalyst Manufacturers, Headquarters and Production Site (Province, Country)

4.5.2 China Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production Value (2018-2023)

4.5.3 China Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production (2018-2023)

4.6 Rest of World Based Ortho-Para Hydrogen Conversion Catalyst Manufacturers and Market Share, 2018-2023

4.6.1 Rest of World Based Ortho-Para Hydrogen Conversion Catalyst Manufacturers,

Headquarters and Production Site (State, Country)

4.6.2 Rest of World Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst
Production Value (2018-2023)

4.6.3 Rest of World Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst
Production (2018-2023)

5 MARKET ANALYSIS BY TYPE

5.1 World Ortho-Para Hydrogen Conversion Catalyst Market Size Overview by Type:
2018 VS 2022 VS 2029

5.2 Segment Introduction by Type

5.2.1 Nickel Catalysts

5.2.2 Metal Oxide Catalysts

5.2.3 Palladium Catalysts

5.2.4 Ruthenium Catalysts

5.2.5 Platinum Catalysts

5.3 Market Segment by Type

5.3.1 World Ortho-Para Hydrogen Conversion Catalyst Production by Type
(2018-2029)

5.3.2 World Ortho-Para Hydrogen Conversion Catalyst Production Value by Type
(2018-2029)

5.3.3 World Ortho-Para Hydrogen Conversion Catalyst Average Price by Type
(2018-2029)

6 MARKET ANALYSIS BY APPLICATION

6.1 World Ortho-Para Hydrogen Conversion Catalyst Market Size Overview by
Application: 2018 VS 2022 VS 2029

6.2 Segment Introduction by Application

6.2.1 Hydrogen Storage

6.2.2 Nuclear Magnetic Resonance (NMR) Spectroscopy

6.2.3 Low-Temperature Chemical Reactions

6.2.4 Others

6.3 Market Segment by Application

6.3.1 World Ortho-Para Hydrogen Conversion Catalyst Production by Application
(2018-2029)

6.3.2 World Ortho-Para Hydrogen Conversion Catalyst Production Value by
Application (2018-2029)

6.3.3 World Ortho-Para Hydrogen Conversion Catalyst Average Price by Application

(2018-2029)

7 COMPANY PROFILES

7.1 Sigma-Aldrich/Merck

7.1.1 Sigma-Aldrich/Merck Details

7.1.2 Sigma-Aldrich/Merck Major Business

7.1.3 Sigma-Aldrich/Merck Ortho-Para Hydrogen Conversion Catalyst Product and Services

7.1.4 Sigma-Aldrich/Merck Ortho-Para Hydrogen Conversion Catalyst Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.1.5 Sigma-Aldrich/Merck Recent Developments/Updates

7.1.6 Sigma-Aldrich/Merck Competitive Strengths & Weaknesses

7.2 Johnson Matthey

7.2.1 Johnson Matthey Details

7.2.2 Johnson Matthey Major Business

7.2.3 Johnson Matthey Ortho-Para Hydrogen Conversion Catalyst Product and Services

7.2.4 Johnson Matthey Ortho-Para Hydrogen Conversion Catalyst Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.2.5 Johnson Matthey Recent Developments/Updates

7.2.6 Johnson Matthey Competitive Strengths & Weaknesses

7.3 BASF

7.3.1 BASF Details

7.3.2 BASF Major Business

7.3.3 BASF Ortho-Para Hydrogen Conversion Catalyst Product and Services

7.3.4 BASF Ortho-Para Hydrogen Conversion Catalyst Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.3.5 BASF Recent Developments/Updates

7.3.6 BASF Competitive Strengths & Weaknesses

7.4 Thermo Fisher Scientific

7.4.1 Thermo Fisher Scientific Details

7.4.2 Thermo Fisher Scientific Major Business

7.4.3 Thermo Fisher Scientific Ortho-Para Hydrogen Conversion Catalyst Product and Services

7.4.4 Thermo Fisher Scientific Ortho-Para Hydrogen Conversion Catalyst Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.4.5 Thermo Fisher Scientific Recent Developments/Updates

7.4.6 Thermo Fisher Scientific Competitive Strengths & Weaknesses

7.5 Clariant

7.5.1 Clariant Details

7.5.2 Clariant Major Business

7.5.3 Clariant Ortho-Para Hydrogen Conversion Catalyst Product and Services

7.5.4 Clariant Ortho-Para Hydrogen Conversion Catalyst Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.5.5 Clariant Recent Developments/Updates

7.5.6 Clariant Competitive Strengths & Weaknesses

7.6 Umicore

7.6.1 Umicore Details

7.6.2 Umicore Major Business

7.6.3 Umicore Ortho-Para Hydrogen Conversion Catalyst Product and Services

7.6.4 Umicore Ortho-Para Hydrogen Conversion Catalyst Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.6.5 Umicore Recent Developments/Updates

7.6.6 Umicore Competitive Strengths & Weaknesses

7.7 Haldor Topsoe

7.7.1 Haldor Topsoe Details

7.7.2 Haldor Topsoe Major Business

7.7.3 Haldor Topsoe Ortho-Para Hydrogen Conversion Catalyst Product and Services

7.7.4 Haldor Topsoe Ortho-Para Hydrogen Conversion Catalyst Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.7.5 Haldor Topsoe Recent Developments/Updates

7.7.6 Haldor Topsoe Competitive Strengths & Weaknesses

7.8 Evonik Industries

7.8.1 Evonik Industries Details

7.8.2 Evonik Industries Major Business

7.8.3 Evonik Industries Ortho-Para Hydrogen Conversion Catalyst Product and Services

7.8.4 Evonik Industries Ortho-Para Hydrogen Conversion Catalyst Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.8.5 Evonik Industries Recent Developments/Updates

7.8.6 Evonik Industries Competitive Strengths & Weaknesses

7.9 Grace Catalysts Technologies

7.9.1 Grace Catalysts Technologies Details

7.9.2 Grace Catalysts Technologies Major Business

7.9.3 Grace Catalysts Technologies Ortho-Para Hydrogen Conversion Catalyst Product and Services

7.9.4 Grace Catalysts Technologies Ortho-Para Hydrogen Conversion Catalyst

Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.9.5 Grace Catalysts Technologies Recent Developments/Updates

7.9.6 Grace Catalysts Technologies Competitive Strengths & Weaknesses

7.10 Strem Chemicals

7.10.1 Strem Chemicals Details

7.10.2 Strem Chemicals Major Business

7.10.3 Strem Chemicals Ortho-Para Hydrogen Conversion Catalyst Product and Services

7.10.4 Strem Chemicals Ortho-Para Hydrogen Conversion Catalyst Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.10.5 Strem Chemicals Recent Developments/Updates

7.10.6 Strem Chemicals Competitive Strengths & Weaknesses

7.11 JGC Catalysts and Chemicals

7.11.1 JGC Catalysts and Chemicals Details

7.11.2 JGC Catalysts and Chemicals Major Business

7.11.3 JGC Catalysts and Chemicals Ortho-Para Hydrogen Conversion Catalyst Product and Services

7.11.4 JGC Catalysts and Chemicals Ortho-Para Hydrogen Conversion Catalyst Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.11.5 JGC Catalysts and Chemicals Recent Developments/Updates

7.11.6 JGC Catalysts and Chemicals Competitive Strengths & Weaknesses

7.12 Molecular Products

7.12.1 Molecular Products Details

7.12.2 Molecular Products Major Business

7.12.3 Molecular Products Ortho-Para Hydrogen Conversion Catalyst Product and Services

7.12.4 Molecular Products Ortho-Para Hydrogen Conversion Catalyst Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.12.5 Molecular Products Recent Developments/Updates

7.12.6 Molecular Products Competitive Strengths & Weaknesses

7.13 Axens

7.13.1 Axens Details

7.13.2 Axens Major Business

7.13.3 Axens Ortho-Para Hydrogen Conversion Catalyst Product and Services

7.13.4 Axens Ortho-Para Hydrogen Conversion Catalyst Production, Price, Value, Gross Margin and Market Share (2018-2023)

7.13.5 Axens Recent Developments/Updates

7.13.6 Axens Competitive Strengths & Weaknesses

7.14 Shanghai Houdry Catalyst Technology

- 7.14.1 Shanghai Houdry Catalyst Technology Details
- 7.14.2 Shanghai Houdry Catalyst Technology Major Business
- 7.14.3 Shanghai Houdry Catalyst Technology Ortho-Para Hydrogen Conversion Catalyst Product and Services
- 7.14.4 Shanghai Houdry Catalyst Technology Ortho-Para Hydrogen Conversion Catalyst Production, Price, Value, Gross Margin and Market Share (2018-2023)
- 7.14.5 Shanghai Houdry Catalyst Technology Recent Developments/Updates
- 7.14.6 Shanghai Houdry Catalyst Technology Competitive Strengths & Weaknesses

8 INDUSTRY CHAIN ANALYSIS

- 8.1 Ortho-Para Hydrogen Conversion Catalyst Industry Chain
- 8.2 Ortho-Para Hydrogen Conversion Catalyst Upstream Analysis
 - 8.2.1 Ortho-Para Hydrogen Conversion Catalyst Core Raw Materials
 - 8.2.2 Main Manufacturers of Ortho-Para Hydrogen Conversion Catalyst Core Raw Materials
- 8.3 Midstream Analysis
- 8.4 Downstream Analysis
- 8.5 Ortho-Para Hydrogen Conversion Catalyst Production Mode
- 8.6 Ortho-Para Hydrogen Conversion Catalyst Procurement Model
- 8.7 Ortho-Para Hydrogen Conversion Catalyst Industry Sales Model and Sales Channels
 - 8.7.1 Ortho-Para Hydrogen Conversion Catalyst Sales Model
 - 8.7.2 Ortho-Para Hydrogen Conversion Catalyst Typical Customers

9 RESEARCH FINDINGS AND CONCLUSION

10 APPENDIX

- 10.1 Methodology
- 10.2 Research Process and Data Source
- 10.3 Disclaimer

List Of Tables

LIST OF TABLES

Table 1. World Ortho-Para Hydrogen Conversion Catalyst Production Value by Region (2018, 2022 and 2029) & (USD Million)

Table 2. World Ortho-Para Hydrogen Conversion Catalyst Production Value by Region (2018-2023) & (USD Million)

Table 3. World Ortho-Para Hydrogen Conversion Catalyst Production Value by Region (2024-2029) & (USD Million)

Table 4. World Ortho-Para Hydrogen Conversion Catalyst Production Value Market Share by Region (2018-2023)

Table 5. World Ortho-Para Hydrogen Conversion Catalyst Production Value Market Share by Region (2024-2029)

Table 6. World Ortho-Para Hydrogen Conversion Catalyst Production by Region (2018-2023) & (Tons)

Table 7. World Ortho-Para Hydrogen Conversion Catalyst Production by Region (2024-2029) & (Tons)

Table 8. World Ortho-Para Hydrogen Conversion Catalyst Production Market Share by Region (2018-2023)

Table 9. World Ortho-Para Hydrogen Conversion Catalyst Production Market Share by Region (2024-2029)

Table 10. World Ortho-Para Hydrogen Conversion Catalyst Average Price by Region (2018-2023) & (US\$/Ton)

Table 11. World Ortho-Para Hydrogen Conversion Catalyst Average Price by Region (2024-2029) & (US\$/Ton)

Table 12. Ortho-Para Hydrogen Conversion Catalyst Major Market Trends

Table 13. World Ortho-Para Hydrogen Conversion Catalyst Consumption Growth Rate Forecast by Region (2018 & 2022 & 2029) & (Tons)

Table 14. World Ortho-Para Hydrogen Conversion Catalyst Consumption by Region (2018-2023) & (Tons)

Table 15. World Ortho-Para Hydrogen Conversion Catalyst Consumption Forecast by Region (2024-2029) & (Tons)

Table 16. World Ortho-Para Hydrogen Conversion Catalyst Production Value by Manufacturer (2018-2023) & (USD Million)

Table 17. Production Value Market Share of Key Ortho-Para Hydrogen Conversion Catalyst Producers in 2022

Table 18. World Ortho-Para Hydrogen Conversion Catalyst Production by Manufacturer (2018-2023) & (Tons)

Table 19. Production Market Share of Key Ortho-Para Hydrogen Conversion Catalyst Producers in 2022

Table 20. World Ortho-Para Hydrogen Conversion Catalyst Average Price by Manufacturer (2018-2023) & (US\$/Ton)

Table 21. Global Ortho-Para Hydrogen Conversion Catalyst Company Evaluation Quadrant

Table 22. World Ortho-Para Hydrogen Conversion Catalyst Industry Rank of Major Manufacturers, Based on Production Value in 2022

Table 23. Head Office and Ortho-Para Hydrogen Conversion Catalyst Production Site of Key Manufacturer

Table 24. Ortho-Para Hydrogen Conversion Catalyst Market: Company Product Type Footprint

Table 25. Ortho-Para Hydrogen Conversion Catalyst Market: Company Product Application Footprint

Table 26. Ortho-Para Hydrogen Conversion Catalyst Competitive Factors

Table 27. Ortho-Para Hydrogen Conversion Catalyst New Entrant and Capacity Expansion Plans

Table 28. Ortho-Para Hydrogen Conversion Catalyst Mergers & Acquisitions Activity

Table 29. United States VS China Ortho-Para Hydrogen Conversion Catalyst Production Value Comparison, (2018 & 2022 & 2029) & (USD Million)

Table 30. United States VS China Ortho-Para Hydrogen Conversion Catalyst Production Comparison, (2018 & 2022 & 2029) & (Tons)

Table 31. United States VS China Ortho-Para Hydrogen Conversion Catalyst Consumption Comparison, (2018 & 2022 & 2029) & (Tons)

Table 32. United States Based Ortho-Para Hydrogen Conversion Catalyst Manufacturers, Headquarters and Production Site (States, Country)

Table 33. United States Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production Value, (2018-2023) & (USD Million)

Table 34. United States Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production Value Market Share (2018-2023)

Table 35. United States Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production (2018-2023) & (Tons)

Table 36. United States Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production Market Share (2018-2023)

Table 37. China Based Ortho-Para Hydrogen Conversion Catalyst Manufacturers, Headquarters and Production Site (Province, Country)

Table 38. China Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production Value, (2018-2023) & (USD Million)

Table 39. China Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst

Production Value Market Share (2018-2023)

Table 40. China Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production (2018-2023) & (Tons)

Table 41. China Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production Market Share (2018-2023)

Table 42. Rest of World Based Ortho-Para Hydrogen Conversion Catalyst Manufacturers, Headquarters and Production Site (States, Country)

Table 43. Rest of World Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production Value, (2018-2023) & (USD Million)

Table 44. Rest of World Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production Value Market Share (2018-2023)

Table 45. Rest of World Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production (2018-2023) & (Tons)

Table 46. Rest of World Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production Market Share (2018-2023)

Table 47. World Ortho-Para Hydrogen Conversion Catalyst Production Value by Type, (USD Million), 2018 & 2022 & 2029

Table 48. World Ortho-Para Hydrogen Conversion Catalyst Production by Type (2018-2023) & (Tons)

Table 49. World Ortho-Para Hydrogen Conversion Catalyst Production by Type (2024-2029) & (Tons)

Table 50. World Ortho-Para Hydrogen Conversion Catalyst Production Value by Type (2018-2023) & (USD Million)

Table 51. World Ortho-Para Hydrogen Conversion Catalyst Production Value by Type (2024-2029) & (USD Million)

Table 52. World Ortho-Para Hydrogen Conversion Catalyst Average Price by Type (2018-2023) & (US\$/Ton)

Table 53. World Ortho-Para Hydrogen Conversion Catalyst Average Price by Type (2024-2029) & (US\$/Ton)

Table 54. World Ortho-Para Hydrogen Conversion Catalyst Production Value by Application, (USD Million), 2018 & 2022 & 2029

Table 55. World Ortho-Para Hydrogen Conversion Catalyst Production by Application (2018-2023) & (Tons)

Table 56. World Ortho-Para Hydrogen Conversion Catalyst Production by Application (2024-2029) & (Tons)

Table 57. World Ortho-Para Hydrogen Conversion Catalyst Production Value by Application (2018-2023) & (USD Million)

Table 58. World Ortho-Para Hydrogen Conversion Catalyst Production Value by Application (2024-2029) & (USD Million)

Table 59. World Ortho-Para Hydrogen Conversion Catalyst Average Price by Application (2018-2023) & (US\$/Ton)

Table 60. World Ortho-Para Hydrogen Conversion Catalyst Average Price by Application (2024-2029) & (US\$/Ton)

Table 61. Sigma-Aldrich/Merck Basic Information, Manufacturing Base and Competitors

Table 62. Sigma-Aldrich/Merck Major Business

Table 63. Sigma-Aldrich/Merck Ortho-Para Hydrogen Conversion Catalyst Product and Services

Table 64. Sigma-Aldrich/Merck Ortho-Para Hydrogen Conversion Catalyst Production (Tons), Price (US\$/Ton), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 65. Sigma-Aldrich/Merck Recent Developments/Updates

Table 66. Sigma-Aldrich/Merck Competitive Strengths & Weaknesses

Table 67. Johnson Matthey Basic Information, Manufacturing Base and Competitors

Table 68. Johnson Matthey Major Business

Table 69. Johnson Matthey Ortho-Para Hydrogen Conversion Catalyst Product and Services

Table 70. Johnson Matthey Ortho-Para Hydrogen Conversion Catalyst Production (Tons), Price (US\$/Ton), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 71. Johnson Matthey Recent Developments/Updates

Table 72. Johnson Matthey Competitive Strengths & Weaknesses

Table 73. BASF Basic Information, Manufacturing Base and Competitors

Table 74. BASF Major Business

Table 75. BASF Ortho-Para Hydrogen Conversion Catalyst Product and Services

Table 76. BASF Ortho-Para Hydrogen Conversion Catalyst Production (Tons), Price (US\$/Ton), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 77. BASF Recent Developments/Updates

Table 78. BASF Competitive Strengths & Weaknesses

Table 79. Thermo Fisher Scientific Basic Information, Manufacturing Base and Competitors

Table 80. Thermo Fisher Scientific Major Business

Table 81. Thermo Fisher Scientific Ortho-Para Hydrogen Conversion Catalyst Product and Services

Table 82. Thermo Fisher Scientific Ortho-Para Hydrogen Conversion Catalyst Production (Tons), Price (US\$/Ton), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 83. Thermo Fisher Scientific Recent Developments/Updates

Table 84. Thermo Fisher Scientific Competitive Strengths & Weaknesses

Table 85. Clariant Basic Information, Manufacturing Base and Competitors

Table 86. Clariant Major Business

Table 87. Clariant Ortho-Para Hydrogen Conversion Catalyst Product and Services

Table 88. Clariant Ortho-Para Hydrogen Conversion Catalyst Production (Tons), Price (US\$/Ton), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 89. Clariant Recent Developments/Updates

Table 90. Clariant Competitive Strengths & Weaknesses

Table 91. Umicore Basic Information, Manufacturing Base and Competitors

Table 92. Umicore Major Business

Table 93. Umicore Ortho-Para Hydrogen Conversion Catalyst Product and Services

Table 94. Umicore Ortho-Para Hydrogen Conversion Catalyst Production (Tons), Price (US\$/Ton), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 95. Umicore Recent Developments/Updates

Table 96. Umicore Competitive Strengths & Weaknesses

Table 97. Haldor Topsoe Basic Information, Manufacturing Base and Competitors

Table 98. Haldor Topsoe Major Business

Table 99. Haldor Topsoe Ortho-Para Hydrogen Conversion Catalyst Product and Services

Table 100. Haldor Topsoe Ortho-Para Hydrogen Conversion Catalyst Production (Tons), Price (US\$/Ton), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 101. Haldor Topsoe Recent Developments/Updates

Table 102. Haldor Topsoe Competitive Strengths & Weaknesses

Table 103. Evonik Industries Basic Information, Manufacturing Base and Competitors

Table 104. Evonik Industries Major Business

Table 105. Evonik Industries Ortho-Para Hydrogen Conversion Catalyst Product and Services

Table 106. Evonik Industries Ortho-Para Hydrogen Conversion Catalyst Production (Tons), Price (US\$/Ton), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 107. Evonik Industries Recent Developments/Updates

Table 108. Evonik Industries Competitive Strengths & Weaknesses

Table 109. Grace Catalysts Technologies Basic Information, Manufacturing Base and Competitors

Table 110. Grace Catalysts Technologies Major Business

Table 111. Grace Catalysts Technologies Ortho-Para Hydrogen Conversion Catalyst

Product and Services

Table 112. Grace Catalysts Technologies Ortho-Para Hydrogen Conversion Catalyst Production (Tons), Price (US\$/Ton), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 113. Grace Catalysts Technologies Recent Developments/Updates

Table 114. Grace Catalysts Technologies Competitive Strengths & Weaknesses

Table 115. Strem Chemicals Basic Information, Manufacturing Base and Competitors

Table 116. Strem Chemicals Major Business

Table 117. Strem Chemicals Ortho-Para Hydrogen Conversion Catalyst Product and Services

Table 118. Strem Chemicals Ortho-Para Hydrogen Conversion Catalyst Production (Tons), Price (US\$/Ton), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 119. Strem Chemicals Recent Developments/Updates

Table 120. Strem Chemicals Competitive Strengths & Weaknesses

Table 121. JGC Catalysts and Chemicals Basic Information, Manufacturing Base and Competitors

Table 122. JGC Catalysts and Chemicals Major Business

Table 123. JGC Catalysts and Chemicals Ortho-Para Hydrogen Conversion Catalyst Product and Services

Table 124. JGC Catalysts and Chemicals Ortho-Para Hydrogen Conversion Catalyst Production (Tons), Price (US\$/Ton), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 125. JGC Catalysts and Chemicals Recent Developments/Updates

Table 126. JGC Catalysts and Chemicals Competitive Strengths & Weaknesses

Table 127. Molecular Products Basic Information, Manufacturing Base and Competitors

Table 128. Molecular Products Major Business

Table 129. Molecular Products Ortho-Para Hydrogen Conversion Catalyst Product and Services

Table 130. Molecular Products Ortho-Para Hydrogen Conversion Catalyst Production (Tons), Price (US\$/Ton), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 131. Molecular Products Recent Developments/Updates

Table 132. Molecular Products Competitive Strengths & Weaknesses

Table 133. Axens Basic Information, Manufacturing Base and Competitors

Table 134. Axens Major Business

Table 135. Axens Ortho-Para Hydrogen Conversion Catalyst Product and Services

Table 136. Axens Ortho-Para Hydrogen Conversion Catalyst Production (Tons), Price (US\$/Ton), Production Value (USD Million), Gross Margin and Market Share

(2018-2023)

Table 137. Axens Recent Developments/Updates

Table 138. Shanghai Houdry Catalyst Technology Basic Information, Manufacturing Base and Competitors

Table 139. Shanghai Houdry Catalyst Technology Major Business

Table 140. Shanghai Houdry Catalyst Technology Ortho-Para Hydrogen Conversion Catalyst Product and Services

Table 141. Shanghai Houdry Catalyst Technology Ortho-Para Hydrogen Conversion Catalyst Production (Tons), Price (US\$/Ton), Production Value (USD Million), Gross Margin and Market Share (2018-2023)

Table 142. Global Key Players of Ortho-Para Hydrogen Conversion Catalyst Upstream (Raw Materials)

Table 143. Ortho-Para Hydrogen Conversion Catalyst Typical Customers

Table 144. Ortho-Para Hydrogen Conversion Catalyst Typical Distributors

List Of Figures

LIST OF FIGURES

Figure 1. Ortho-Para Hydrogen Conversion Catalyst Picture

Figure 2. World Ortho-Para Hydrogen Conversion Catalyst Production Value: 2018 & 2022 & 2029, (USD Million)

Figure 3. World Ortho-Para Hydrogen Conversion Catalyst Production Value and Forecast (2018-2029) & (USD Million)

Figure 4. World Ortho-Para Hydrogen Conversion Catalyst Production (2018-2029) & (Tons)

Figure 5. World Ortho-Para Hydrogen Conversion Catalyst Average Price (2018-2029) & (US\$/Ton)

Figure 6. World Ortho-Para Hydrogen Conversion Catalyst Production Value Market Share by Region (2018-2029)

Figure 7. World Ortho-Para Hydrogen Conversion Catalyst Production Market Share by Region (2018-2029)

Figure 8. North America Ortho-Para Hydrogen Conversion Catalyst Production (2018-2029) & (Tons)

Figure 9. Europe Ortho-Para Hydrogen Conversion Catalyst Production (2018-2029) & (Tons)

Figure 10. China Ortho-Para Hydrogen Conversion Catalyst Production (2018-2029) & (Tons)

Figure 11. Japan Ortho-Para Hydrogen Conversion Catalyst Production (2018-2029) & (Tons)

Figure 12. Ortho-Para Hydrogen Conversion Catalyst Market Drivers

Figure 13. Factors Affecting Demand

Figure 14. World Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029) & (Tons)

Figure 15. World Ortho-Para Hydrogen Conversion Catalyst Consumption Market Share by Region (2018-2029)

Figure 16. United States Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029) & (Tons)

Figure 17. China Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029) & (Tons)

Figure 18. Europe Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029) & (Tons)

Figure 19. Japan Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029) & (Tons)

Figure 20. South Korea Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029) & (Tons)

Figure 21. ASEAN Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029) & (Tons)

Figure 22. India Ortho-Para Hydrogen Conversion Catalyst Consumption (2018-2029) & (Tons)

Figure 23. Producer Shipments of Ortho-Para Hydrogen Conversion Catalyst by Manufacturer Revenue (\$MM) and Market Share (%): 2022

Figure 24. Global Four-firm Concentration Ratios (CR4) for Ortho-Para Hydrogen Conversion Catalyst Markets in 2022

Figure 25. Global Four-firm Concentration Ratios (CR8) for Ortho-Para Hydrogen Conversion Catalyst Markets in 2022

Figure 26. United States VS China: Ortho-Para Hydrogen Conversion Catalyst Production Value Market Share Comparison (2018 & 2022 & 2029)

Figure 27. United States VS China: Ortho-Para Hydrogen Conversion Catalyst Production Market Share Comparison (2018 & 2022 & 2029)

Figure 28. United States VS China: Ortho-Para Hydrogen Conversion Catalyst Consumption Market Share Comparison (2018 & 2022 & 2029)

Figure 29. United States Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production Market Share 2022

Figure 30. China Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production Market Share 2022

Figure 31. Rest of World Based Manufacturers Ortho-Para Hydrogen Conversion Catalyst Production Market Share 2022

Figure 32. World Ortho-Para Hydrogen Conversion Catalyst Production Value by Type, (USD Million), 2018 & 2022 & 2029

Figure 33. World Ortho-Para Hydrogen Conversion Catalyst Production Value Market Share by Type in 2022

Figure 34. Nickel Catalysts

Figure 35. Metal Oxide Catalysts

Figure 36. Palladium Catalysts

Figure 37. Ruthenium Catalysts

Figure 38. Platinum Catalysts

Figure 39. World Ortho-Para Hydrogen Conversion Catalyst Production Market Share by Type (2018-2029)

Figure 40. World Ortho-Para Hydrogen Conversion Catalyst Production Value Market Share by Type (2018-2029)

Figure 41. World Ortho-Para Hydrogen Conversion Catalyst Average Price by Type (2018-2029) & (US\$/Ton)

- Figure 42. World Ortho-Para Hydrogen Conversion Catalyst Production Value by Application, (USD Million), 2018 & 2022 & 2029
- Figure 43. World Ortho-Para Hydrogen Conversion Catalyst Production Value Market Share by Application in 2022
- Figure 44. Hydrogen Storage
- Figure 45. Nuclear Magnetic Resonance (NMR) Spectroscopy
- Figure 46. Low-Temperature Chemical Reactions
- Figure 47. Others
- Figure 48. World Ortho-Para Hydrogen Conversion Catalyst Production Market Share by Application (2018-2029)
- Figure 49. World Ortho-Para Hydrogen Conversion Catalyst Production Value Market Share by Application (2018-2029)
- Figure 50. World Ortho-Para Hydrogen Conversion Catalyst Average Price by Application (2018-2029) & (US\$/Ton)
- Figure 51. Ortho-Para Hydrogen Conversion Catalyst Industry Chain
- Figure 52. Ortho-Para Hydrogen Conversion Catalyst Procurement Model
- Figure 53. Ortho-Para Hydrogen Conversion Catalyst Sales Model
- Figure 54. Ortho-Para Hydrogen Conversion Catalyst Sales Channels, Direct Sales, and Distribution
- Figure 55. Methodology
- Figure 56. Research Process and Data Source

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