

2018 Top 5 Serine Players in North America, Europe, Asia-Pacific, South America, Middle East and Africa

<https://marketpublishers.com/r/2D39C3AA1CCEN.html>

Date: July 2018

Pages: 124

Price: US\$ 4,960.00 (Single User License)

ID: 2D39C3AA1CCEN

Abstracts

The report requires updating with new data and is sent in 48 hours after order is placed.

Serine is an amino acid with the formula $\text{HO}_2\text{CCH}(\text{NH}_2)\text{CH}_2\text{OH}$. It is one of the proteinogenic amino acids. It contains L-Serine, D- Serine and DL- Serine three types.

Serine is a non-essential amino acid in humans (synthesized by the body), Serine is present and functionally important in many proteins. With an alcohol group, serine is needed for the metabolism of fats, fatty acids, and cell membranes; muscle growth; and a healthy immune system. It also plays a major role in pyrimidine, purine, creatine, and porphyrin biosynthetic pathways. Serine is also found at the active site of the serine protease enzyme class that includes trypsin and chymotrypsin.

In consumption market, the global sales value increases with the 7.38% average growth rate. North America, Europe and China are the mainly consumption regions due to the bigger demand of downstream applications.

Serine has three types, which include L-serine, D-serine and DL-serine. And each type has application industries relatively. With nutrition effect of serine, the downstream application industries will need more serine products. So, serine has a huge market potential in the future. Manufacturers engaged in the industry are trying to produce high purity and good performance serine through improving technology.

The major raw materials for serine are glycine and formaldehyde, etc. Fluctuations in the price of the upstream product will impact on the production cost of serine, and then impact the price of serine. The production cost of serine is also an important factor which could impact the price of serine. The serine manufacturers are trying to reduce production cost by developing production method.

We tend to believe this industry is a rising industry, and the consumption increasing degree will show a smooth growth curve. And the price presents decreasing trend according to the economy development status and international competition. Also, there

will be decreasing trend in gross margin.

Over the next five years, LPI(LP Information) projects that Serine will register a 4.2% CAGR in terms of revenue, reach US\$ 850 million by 2023, from US\$ 660 million in 2017.

This report studies the global market, especially in North America, Europe, Asia-Pacific, South America, Middle East and Africa, focuses on the top 5 players in each region, with sales, price, revenue and market share from 2013 to 2018, the top players:

Ajinomoto

Evonik

KYOWA

Mitsui Chemicals

Amino

Wuxi Jinghai Amino Acid

Puyer Biopharma

Bafeng Pharmaceutical

Jiahe Biotech

Hua Yang Chemical

Market Segment by Regions, this report splits Global into several key Regions, with sales, revenue, market share of top players in these regions, from 2013 to 2018 (forecast), like

North America (United States, Canada and Mexico)

Asia-Pacific (China, Japan, Southeast Asia, India and Korea)

Europe (Germany, UK, France, Italy and Russia etc.)

South America (Brazil, Chile, Peru and Argentina)

Middle East and Africa (Egypt, South Africa, Saudi Arabia)

Split by Product Types, with sales, revenue, price, market share of each type, can be divided into

L-Serine

D-Serine

DL-Serine

Split by applications, this report focuses on sales, market share and growth rate in each application, can be divided into

Pharmaceutical Industry

Food Industry

Cosmetics Industry

Others

Contents

1 SERINE MARKET OVERVIEW

- 1.1 Product Overview and Scope of Serine
- 1.2 Serine Segment by Types
 - 1.2.1 Global Sales Market Share of Serine by Types in 2017
 - 1.2.2 L-Serine
 - 1.2.2.1 Major Players of Type I
 - 1.2.3 D-Serine
 - 1.2.3.1 Major Players of D-Serine
 - 1.2.4 DL-Serine
 - 1.2.4.1 Major Players of DL-Serine
- 1.3 Serine Segment by Applications
 - 1.3.1 Serine Sales Market Share by Applications in 2017
 - 1.3.2 Pharmaceutical Industry
 - 1.3.3 Food Industry
 - 1.3.4 Cosmetics Industry
 - 1.3.5 Others
- 1.4 Serine Market by Regions
 - 1.4.1 North America Status and Prospect (2013-2023)
 - 1.4.1.1 North America Serine Revenue (Million USD) and Growth Rate (2013-2023)
 - 1.4.2 Asia-Pacific Status and Prospect (2013-2023)
 - 1.4.2.1 Asia-Pacific Serine Revenue (Million USD) and Growth Rate (2013-2023)
 - 1.4.3 Europe Status and Prospect (2013-2023)
 - 1.4.3.1 Europe Serine Revenue (Million USD) and Growth Rate (2013-2023)
 - 1.4.4 South America Status and Prospect (2013-2023)
 - 1.4.4.1 South America Serine Revenue (Million USD) and Growth Rate (2013-2023)
 - 1.4.5 Middle East and Africa Status and Prospect (2013-2023)
 - 1.4.5.1 Middle East and Africa Serine Revenue (Million USD) and Growth Rate (2013-2023)
- 1.5 Global Market Size (Value) of Serine (2013-2023)

2 GLOBAL SERINE SALES, REVENUE (VALUE) AND MARKET SHARE BY PLAYERS

- 2.1 Global Serine Sales and Market Share by Players in 2016 and 2017
 - 2.1.1 Global Serine Sales by Players in 2016 and 2017
 - 2.1.2 Global Serine Sales Market Share (%) by Players in 2016 and 2017

- 2.2 Global Serine Revenue and Market Share by Players in 2016 and 2017
 - 2.2.1 Global Serine Revenue by Players in 2016 and 2017
 - 2.2.2 Global Serine Revenue Market Share (%) by Players in 2016 and 2017
- 2.3 Global Serine Average Price by Players in 2016 and 2017
- 2.4 Global Serine Manufacturing Base Distribution, Sales Area, Product Types by Players
 - 2.4.1 Global Serine Manufacturing Base Distribution and Sales Area by Players
 - 2.4.2 Players Serine Product Types
- 2.5 Serine Market Competitive Situation and Trends
 - 2.5.1 Serine Market Concentration Rate
 - 2.5.2 Serine Market Share of Top 3 and Top 5 Players
 - 2.5.3 Mergers & Acquisitions, Expansion

3 GLOBAL SERINE SALES, REVENUE (VALUE) BY REGIONS, TYPE AND APPLICATION (2013-2018)

- 3.1 Global Serine Sales, Revenue and Market Share by Regions (2013-2018)
 - 3.1.1 Global Serine Sales and Market Share by Regions (2013-2018)
 - 3.1.2 Global Serine Revenue and Market Share by Regions (2013-2018)
- 3.2 Global Serine Sales, Revenue, Market Share and Price by Type (2013-2018)
 - 3.2.1 Global Serine Sales and Market Share by Type (2013-2018)
 - 3.2.2 Global Serine Revenue and Market Share by Type (2013-2018)
 - 3.2.3 Global Serine Price by Type (2013-2018)
- 3.3 Global Serine Sales and Market Share by Application (2013-2018)
 - 3.3.1 Global Serine Sales by Application (2013-2018)
 - 3.3.2 Global Serine Sales Market Share by Application (2013-2018)
- 3.4 Global Serine Sales, Revenue, Price and Gross Margin (2013-2018)

4 NORTH AMERICA TOP 5 PLAYERS SERINE SALES, REVENUE AND PRICE

- 4.1 North America Top 5 Players Serine Sales, Revenue and Market Share in 2016 and 2017
 - 4.1.1 North America Top 5 Players Serine Sales and Market Share in 2016 and 2017
 - 4.1.2 North America Top 5 Players Serine Revenue and Market Share in 2016 and 2017
- 4.2 North America Serine Sales, Revenue, Market Share and Price by Type (2013-2018)
 - 4.2.1 North America Serine Sales and Market Share by Type (2013-2018)
 - 4.2.1.1 North America Serine Sales by Type (2013-2018)

- 4.2.1.2 North America Serine Sales Market Share by Type (2013-2018)
- 4.2.2 North America Serine Revenue and Market Share by Type (2013-2018)
 - 4.2.2.1 North America Serine Revenue by Type (2013-2018)
 - 4.2.2.2 North America Serine Revenue Market Share by Type (2013-2018)
- 4.2.3 North America Serine Price by Type (2013-2018)
- 4.3 North America Serine Sales and Market Share by Application (2013-2018)
 - 4.3.1 North America Serine Sales by Application (2013-2018)
 - 4.3.2 North America Serine Sales Market Share by Application (2013-2018)
- 4.4 North America Serine Sales and Market Share by Country (US, Canada and Mexico) (2013-2018)
 - 4.4.1 North America Serine Sales by Country (2013-2018)
 - 4.4.2 North America Serine Sales Market Share by Country (2013-2018)
- 4.5 North America Serine Import & Export (2013-2018)

5 EUROPE TOP 5 PLAYERS SERINE SALES, REVENUE AND PRICE

- 5.1 Europe Top 5 Players Serine Sales, Revenue and Market Share in 2016 and 2017
 - 5.1.1 Europe Top 5 Players Serine Sales and Market Share in 2016 and 2017
 - 5.1.2 Europe Top 5 Players Serine Revenue and Market Share in 2016 and 2017
- 5.2 Europe Serine Sales, Revenue, Market Share and Price by Type (2013-2018)
 - 5.2.1 Europe Serine Sales and Market Share by Type (2013-2018)
 - 5.2.1.1 Europe Serine Sales by Type (2013-2018)
 - 5.2.1.2 Europe Serine Sales Market Share by Type (2013-2018)
 - 5.2.2 Europe Serine Revenue and Market Share by Type (2013-2018)
 - 5.2.2.1 Europe Serine Revenue by Type (2013-2018)
 - 5.2.2.2 Europe Serine Revenue Market Share by Type (2013-2018)
 - 5.2.3 Europe Serine Price by Type (2013-2018)
- 5.3 Europe Serine Sales and Market Share by Application (2013-2018)
 - 5.3.1 Europe Serine Sales by Application (2013-2018)
 - 5.3.2 Europe Serine Sales Market Share by Application (2013-2018)
- 5.4 Europe Serine Sales and Market Share by Country (Germany, UK, France, Italy and Russia) (2013-2018)
 - 5.4.1 Europe Serine Sales by Country (2013-2018)
 - 5.4.2 Europe Serine Sales Market Share by Country (2013-2018)
- 5.5 Europe Serine Import & Export (2013-2018)

6 ASIA-PACIFIC TOP 5 PLAYERS SERINE SALES, REVENUE AND PRICE

- 6.1 Asia-Pacific Top 5 Players Serine Sales, Revenue and Market Share in 2016 and

2017

- 6.1.1 Asia-Pacific Top 5 Players Serine Sales and Market Share in 2016 and 2017
- 6.1.2 Asia-Pacific Top 5 Players Serine Revenue and Market Share in 2016 and 2017
- 6.2 Asia-Pacific Serine Sales, Revenue, Market Share and Price by Type (2013-2018)
 - 6.2.1 Asia-Pacific Serine Sales and Market Share by Type (2013-2018)
 - 6.2.1.1 Asia-Pacific Serine Sales by Type (2013-2018)
 - 6.2.1.2 Asia-Pacific Serine Sales Market Share by Type (2013-2018)
 - 6.2.2 Asia-Pacific Serine Revenue and Market Share by Type (2013-2018)
 - 6.2.3 Asia-Pacific Serine Price by Type (2013-2018)
- 6.3 Asia-Pacific Serine Sales and Market Share by Application (2013-2018)
 - 6.3.1 Asia-Pacific Serine Sales by Application (2013-2018)
 - 6.3.2 Asia-Pacific Serine Sales Market Share by Application (2013-2018)
- 6.4 Asia-Pacific Serine Sales and Market Share by Country (China, Japan, Southeast Asia, India, Korea and Australia) (2013-2018)
 - 6.4.1 Asia-Pacific Serine Sales by Country (2013-2018)
 - 6.4.2 Asia-Pacific Serine Sales Market Share by Country (2013-2018)
- 6.5 Asia-Pacific Serine Import & Export (2013-2018)

7 SOUTH AMERICA TOP 5 PLAYERS SERINE SALES, REVENUE AND PRICE

- 7.1 South America Top 5 Players Serine Sales, Revenue and Market Share in 2016 and 2017
 - 7.1.1 South America Top 5 Players Serine Sales and Market Share in 2016 and 2017
 - 7.1.2 South America Top 5 Players Serine Revenue and Market Share in 2016 and 2017
- 7.2 South America Serine Sales, Revenue, Market Share and Price by Type (2013-2018)
 - 7.2.1 South America Serine Sales and Market Share by Type (2013-2018)
 - 7.2.1.1 South America Serine Sales by Type (2013-2018)
 - 7.2.1.2 South America Serine Sales Market Share by Type (2013-2018)
 - 7.2.2 South America Serine Revenue and Market Share by Type (2013-2018)
 - 7.2.2.1 South America Serine Revenue by Type (2013-2018)
 - 7.2.2.2 South America Serine Revenue and Market Share by Type (2013-2018)
 - 7.2.3 South America Serine Price by Type (2013-2018)
- 7.3 South America Serine Sales and Market Share by Application (2013-2018)
 - 7.3.1 South America Serine Sales by Application (2013-2018)
 - 7.3.2 South America Serine Sales Market Share by Application (2013-2018)
- 7.4 South America Serine Sales and Market Share by Country (Brazil, Argentina, Chile and Peru) (2013-2018)

- 7.4.1 South America Serine Sales by Country (2013-2018)
- 7.4.2 South America Serine Sales Market Share by Country (2013-2018)
- 7.5 South America Serine Import & Export (2013-2018)

8 MIDDLE EAST & AFRICA TOP 5 PLAYERS SERINE SALES, REVENUE AND PRICE

- 8.1 Middle East & Africa Top 5 Players Serine Sales, Revenue and Market Share in 2016 and 2017
 - 8.1.1 Middle East & Africa Top 5 Players Serine Sales and Market Share in 2016 and 2017
 - 8.1.2 Middle East & Africa Top 5 Players Serine Revenue and Market Share in 2016 and 2017
- 8.2 Middle East & Africa Serine Sales, Revenue, Market Share and Price by Type (2013-2018)
 - 8.2.1 Middle East & Africa Serine Sales and Market Share by Type (2013-2018)
 - 8.2.1.1 Middle East & Africa Serine Sales by Type (2013-2018)
 - 8.2.1.2 Middle East & Africa Serine Sales Market Share by Type (2013-2018)
 - 8.2.2 Middle East & Africa Serine Revenue and Market Share by Type (2013-2018)
 - 8.2.2.1 Middle East & Africa Serine Revenue by Type (2013-2018)
 - 8.2.2.2 Middle East & Africa Serine Revenue Market Share by Type (2013-2018)
 - 8.2.3 Middle East & Africa Serine Price by Type (2013-2018)
- 8.3 Middle East & Africa Serine Sales and Market Share by Application (2013-2018)
 - 8.3.1 Middle East & Africa Serine Sales by Application (2013-2018)
 - 8.3.2 Middle East & Africa Serine Sales Market Share by Application (2013-2018)
- 8.4 Middle East & Africa Serine Sales and Market Share by Country (Egypt, Saudi Arabia, South Africa and Iran) (2013-2018)
 - 8.4.1 Middle East & Africa Serine Sales by Country (2013-2018)
 - 8.4.2 Middle East & Africa Serine Sales Market Share by Country (2013-2018)
- 8.5 Middle East & Africa Serine Import & Export (2013-2018)

9 GLOBAL SERINE PLAYERS PROFILES/ANALYSIS

- 9.1 Ajinomoto
 - 9.1.1 Company Basic Information, Manufacturing Base, Sales Area and Its Competitors
 - 9.1.2 Serine Product Types, Application and Specification
 - 9.1.2.1 Product A
 - 9.1.2.2 Product B

9.1.3 Ajinomoto Serine Sales, Revenue, Price and Gross Margin (2013-2018)

9.1.4 Main Business/Business Overview

9.1.5 Ajinomoto News

9.2 Evonik

9.2.1 Company Basic Information, Manufacturing Base, Sales Area and Its

Competitors

9.2.2 Serine Product Types, Application and Specification

9.2.2.1 Product A

9.2.2.2 Product B

9.2.3 Evonik Serine Sales, Revenue, Price and Gross Margin (2013-2018)

9.2.4 Main Business/Business Overview

9.2.5 Evonik News

9.3 KYOWA

9.3.1 Company Basic Information, Manufacturing Base, Sales Area and Its

Competitors

9.3.2 Serine Product Types, Application and Specification

9.3.2.1 Product A

9.3.2.2 Product B

9.3.3 KYOWA Serine Sales, Revenue, Price and Gross Margin (2013-2018)

9.3.4 Main Business/Business Overview

9.3.5 KYOWA News

9.4 Mitsui Chemicals

9.4.1 Company Basic Information, Manufacturing Base, Sales Area and Its

Competitors

9.4.2 Serine Product Types, Application and Specification

9.4.2.1 Product A

9.4.2.2 Product B

9.4.3 Mitsui Chemicals Serine Sales, Revenue, Price and Gross Margin (2013-2018)

9.4.4 Main Business/Business Overview

9.4.5 Mitsui Chemicals News

9.5 Amino

9.5.1 Company Basic Information, Manufacturing Base, Sales Area and Its

Competitors

9.5.2 Serine Product Types, Application and Specification

9.5.2.1 Product A

9.5.2.2 Product B

9.5.3 Amino Serine Sales, Revenue, Price and Gross Margin (2013-2018)

9.5.4 Main Business/Business Overview

9.5.5 Amino News

9.6 Wuxi Jinghai Amino Acid

9.6.1 Company Basic Information, Manufacturing Base, Sales Area and Its Competitors

9.6.2 Serine Product Types, Application and Specification

9.6.2.1 Product A

9.6.2.2 Product B

9.6.3 Wuxi Jinghai Amino Acid Serine Sales, Revenue, Price and Gross Margin (2013-2018)

9.6.4 Main Business/Business Overview

9.6.5 Wuxi Jinghai Amino Acid News

9.7 Puyer Biopharma

9.7.1 Company Basic Information, Manufacturing Base, Sales Area and Its Competitors

9.7.2 Serine Product Types, Application and Specification

9.7.2.1 Product A

9.7.2.2 Product B

9.7.3 Puyer Biopharma Serine Sales, Revenue, Price and Gross Margin (2013-2018)

9.7.4 Main Business/Business Overview

9.7.5 Puyer Biopharma News

9.8 Bafeng Pharmaceutical

9.8.1 Company Basic Information, Manufacturing Base, Sales Area and Its Competitors

9.8.2 Serine Product Types, Application and Specification

9.8.2.1 Product A

9.8.2.2 Product B

9.8.3 Bafeng Pharmaceutical Serine Sales, Revenue, Price and Gross Margin (2013-2018)

9.8.4 Main Business/Business Overview

9.8.5 Bafeng Pharmaceutical News

9.9 Jiahe Biotech

9.9.1 Company Basic Information, Manufacturing Base, Sales Area and Its Competitors

9.9.2 Serine Product Types, Application and Specification

9.9.2.1 Product A

9.9.2.2 Product B

9.9.3 Jiahe Biotech Serine Sales, Revenue, Price and Gross Margin (2013-2018)

9.9.4 Main Business/Business Overview

9.9.5 Jiahe Biotech News

9.10 Hua Yang Chemical

9.10.1 Company Basic Information, Manufacturing Base, Sales Area and Its Competitors

9.10.2 Serine Product Types, Application and Specification

9.10.2.1 Product A

9.10.2.2 Product B

9.10.3 Hua Yang Chemical Serine Sales, Revenue, Price and Gross Margin (2013-2018)

9.10.4 Main Business/Business Overview

9.10.5 Hua Yang Chemical News

10 GLOBAL SERINE MARKET FORECAST (2018-2023)

10.1 Global Serine Sales, Revenue Forecast (2018-2023)

10.2 Global Serine Sales, Consumption Forecast by Regions (2018-2023)

10.2.1 Global Serine Sales Forecast by Regions (2018-2023)

10.2.2 Global Serine Sales Market Share Forecast by Regions (2018-2023)

10.3 Global Serine Sales and Market Share Forecast by Type (2018-2023)

10.3.1 Global Serine Sales Forecast by Type (2018-2023)

10.3.2 Global Serine Sales Market Share Forecast by Type (2018-2023)

10.4 Global Serine Sales and Market Share Forecast by Application (2018-2023)

10.4.1 Global Serine Sales Forecast by Application (2018-2023)

10.4.2 Global Serine Sales Market Share Forecast by Application (2018-2023)

10.5 Serine Price Forecast (2018-2023)

11 SERINE MANUFACTURING COST ANALYSIS

11.1 Serine Key Raw Materials Analysis

11.1.1 Key Raw Materials

11.1.2 Price Trend of Key Raw Materials

11.1.3 Key Suppliers of Raw Materials

11.1.4 Market Concentration Rate of Raw Materials

11.2 Proportion of Manufacturing Cost Structure

11.2.1 Raw Materials

11.2.2 Labor Cost

11.2.3 Manufacturing Expenses

11.3 Manufacturing Process Analysis of Serine

12 INDUSTRIAL CHAIN, SOURCING STRATEGY AND DOWNSTREAM BUYERS

- 12.1 Serine Industrial Chain Analysis
- 12.2 Upstream Raw Materials Sourcing
- 12.3 Raw Materials Sources of Serine Major Players in 2017
- 12.4 Downstream Buyers

13 MARKETING STRATEGY ANALYSIS, DISTRIBUTORS/TRADERS

- 13.1 Marketing Channel
 - 13.1.1 Direct Marketing
 - 13.1.2 Indirect Marketing
 - 13.1.3 Marketing Channel Development Trend
- 13.2 Market Positioning
 - 13.2.1 Pricing Strategy
 - 13.2.2 Brand Strategy
 - 13.2.3 Target Client
- 13.3 Distributors/Traders List

14 MARKET EFFECT FACTORS ANALYSIS

- 14.1 Technology Progress/Risk
 - 14.1.1 Substitutes Threat
 - 14.1.2 Technology Progress in Related Industry
- 14.2 Consumer Needs/Customer Preference Change
- 14.3 Economic/Political Environmental Change

15 RESEARCH FINDINGS AND CONCLUSION

16 APPENDIX

- 16.1 Methodology
- 16.2 Data Source

List Of Tables

LIST OF TABLES AND FIGURES

Figure Picture of Serine
Table Product Specifications of Serine
Figure Global Sales Market Share of Serine by Types in 2017
Figure Product Picture of L-Serine
Table Major Players of L-Serine
Figure Product Picture of D-Serine
Table Major Players of D-Serine
Figure Product Picture of DL-Serine
Table Major Players of DL-Serine
Figure Serine Sales Market Share by Applications in 2017
Table Applications of Serine
Figure Food Industry Examples
Figure Cosmetics Industry Examples
Figure Others Examples
Figure North America Serine Revenue (Million USD) and Growth Rate (2013-2023)
Figure Asia-Pacific Serine Revenue (Million USD) and Growth Rate (2013-2023)
Figure Europe Serine Revenue (Million USD) and Growth Rate (2013-2023)
Figure South America Serine Revenue (Million USD) and Growth Rate (2013-2023)
Figure Middle East and Africa Serine Revenue (Million USD) and Growth Rate (2013-2023)
Figure Global Serine Revenue (Million USD) and Growth Rate (2013-2023)
Table Global Serine Sales by Players in 2016 and 2017
Table Global Serine Sales Market Share (%) by Players in 2016 and 2017
Figure Global Serine Sales Market Share by Players in 2016
Figure Global Serine Sales Market Share by Players in 2017
Table Global Serine Revenue by Players in 2016 and 2017
Table Global Serine Revenue Market Share (%) by Players in 2016 and 2017
Figure Global Serine Revenue Market Share by Players in 2016
Figure Global Serine Revenue Market Share by Players in 2017
Table Global Serine Average Price by Players in 2016 and 2017
Figure Global Serine Average Price by Players in 2017
Table Global Serine Manufacturing Base Distribution and Sales Area by Players
Table Players Serine Product Types
Figure Serine Market Share of Top 3 Players
Figure Serine Market Share of Top 5 Players

Table Global Serine Sales by Regions (2013-2018)
Table Global Serine Sales Market Share by Regions (2013-2018)
Figure Global Serine Sales Market Share by Regions (2013-2018)
Figure Global Serine Sales Market Share by Regions in 2017
Table Global Serine Revenue by Regions (2013-2018)
Table Global Serine Revenue Market Share by Regions (2013-2018)
Figure Global Serine Revenue Market Share by Regions (2013-2018)
Figure Global Serine Revenue Market Share by Regions in 2017
Table Global Serine Sales by Type (2013-2018)
Table Global Serine Sales Market Share by Type (2013-2018)
Figure Global Serine Sales Market Share by Type (2013-2018)
Figure Global Serine Sales Market Share by Type in 2017
Table Global Serine Revenue by Type (2013-2018)
Table Global Serine Revenue Market Share by Type (2013-2018)
Figure Global Serine Revenue Market Share by Type (2013-2018)
Figure Global Serine Revenue Market Share by Type in 2017
Table Global Serine Price by Type (2013-2018)
Table Global Serine Sales by Application (2013-2018)
Figure Global Serine Sales Market Share by Application in 2017
Table Global Serine Sales Market Share by Application (2013-2018)
Figure Global Serine Sales Market Share by Application (2013-2018)
Table Global Serine Sales, Revenue, Price and Gross Margin (2013-2018)
Table North America Top 5 Players Serine Sales in 2016 and 2017
Table North America Top 5 Players Serine Sales Market Share (%) in 2016 and 2017
Figure North America Top 5 Players Serine Sales Share in 2016
Figure North America Top 5 Players Serine Sales Share in 2017
Table North America Top 5 Players Serine Revenue in 2016 and 2017
Table North America Top 5 Players Serine Revenue Market Share (%) in 2016 and 2017
Figure North America Top 5 Players Serine Revenue Share in 2016
Figure North America Top 5 Players Serine Revenue Share in 2017
Table North America Serine Sales by Type (2013-2018)
Figure 2017 North America Serine Sales Market Share by Type
Table North America Serine Sales Market Share by Type (2013-2018)
Figure North America Serine Sales Market Share by Type (2013-2018)
Table North America Serine Revenue by Type (2013-2018)
Figure North America Serine Revenue Market Share by Type in 2017
Table North America Serine Revenue Market Share by Type (2013-2018)
Figure North America Serine Revenue Market Share by Type (2013-2018)

Table North America Serine Price by Type (2013-2018)
Table North America Serine Sales by Application (2013-2018)
Figure North America Serine Sales by Application in 2017
Table North America Serine Sales Market Share by Application (2013-2018)
Figure North America Serine Sales Market Share by Application (2013-2018)
Table North America Serine Sales by Country (2013-2018)
Figure 2017 North America Serine Sales Market Share by Country
Table North America Serine Sales Market Share by Country (2013-2018)
Figure North America Serine Sales Market Share by Country (2013-2018)
Table North America Serine Import & Export (2013-2018)
Table Europe Top 5 Players Serine Sales in 2016 and 2017
Table Europe Top 5 Players Serine Sales Market Share (%) in 2016 and 2017
Figure Europe Top 5 Players Serine Sales Share in 2016
Figure Europe Top 5 Players Serine Sales Share in 2017
Table Europe Top 5 Players Serine Revenue in 2016 and 2017
Table Europe Top 5 Players Serine Revenue Market Share (%) in 2016 and 2017
Figure Europe Top 5 Players Serine Revenue Share in 2016
Figure Europe Top 5 Players Serine Revenue Share in 2017
Table Europe Serine Sales by Type (2013-2018)
Figure 2017 Europe Serine Sales Market Share by Type
Table Europe Serine Sales Market Share by Type (2013-2018)
Figure Europe Serine Sales Market Share by Type (2013-2018)
Table Europe Serine Revenue by Type (2013-2018)
Figure Europe Serine Revenue Market Share by Type in 2017
Table Europe Serine Revenue Market Share by Type (2013-2018)
Figure Europe Serine Revenue Market Share by Type (2013-2018)
Table Europe Serine Price by Type (2013-2018)
Table Europe Serine Sales by Application (2013-2018)
Figure Europe Serine Sales Market Share by Application in 2017
Table Europe Serine Sales Market Share by Application (2013-2018)
Figure Europe Serine Sales Market Share by Application (2013-2018)
Table Europe Serine Sales by Country (2013-2018)
Figure Europe Serine Sales Market Share by Country in 2017
Table Europe Serine Sales Market Share by Country (2013-2018)
Figure Europe Serine Sales Market Share by Country (2013-2018)
Table Europe Serine Import & Export (2013-2018)
Table Asia-Pacific Top 5 Players Serine Sales in 2016 and 2017
Table Asia-Pacific Top 5 Players Serine Sales Market Share (%) in 2016 and 2017
Figure Asia-Pacific Top 5 Players Serine Sales Share in 2016

Figure Asia-Pacific Top 5 Players Serine Sales Share in 2017
Table Asia-Pacific Top 5 Players Serine Revenue in 2016 and 2017
Table Asia-Pacific Top 5 Players Serine Revenue Market Share (%) in 2016 and 2017
Figure Asia-Pacific Top 5 Players Serine Revenue Share in 2016
Figure Asia-Pacific Top 5 Players Serine Revenue Share in 2017
Table Asia-Pacific Serine Sales by Type (2013-2018)
Figure Asia-Pacific Serine Sales Market Share by Type in 2017
Table Asia-Pacific Serine Sales Market Share by Type (2013-2018)
Figure Asia-Pacific Serine Sales Market Share by Type (2013-2018)
Table Asia-Pacific Serine Revenue by Type (2013-2018)
Table Asia-Pacific Serine Revenue Market Share by Type (2013-2018)
Figure Asia-Pacific Serine Revenue Market Share by Type (2013-2018)
Figure Asia-Pacific Serine Revenue Market Share by Type in 2017
Table Asia-Pacific Serine Price by Type (2013-2018)
Table Asia-Pacific Serine Sales by Application (2013-2018)
Figure Asia-Pacific Serine Sales by Application in 2017
Table Asia-Pacific Serine Sales Market Share by Application (2013-2018)
Figure Asia-Pacific Serine Sales Market Share by Application (2013-2018)
Table Asia-Pacific Serine Sales by Country (2013-2018)
Figure Asia-Pacific Serine Sales Market Share by Country in 2017
Table Asia-Pacific Serine Sales Market Share by Country (2013-2018)
Figure Asia-Pacific Serine Sales Market Share by Country (2013-2018)
Table Asia-Pacific Serine Import & Export (2013-2018)
Table South America Top 5 Players Serine Sales in 2016 and 2017
Table South America Top 5 Players Serine Sales Market Share (%) in 2016 and 2017
Figure South America Top 5 Players Serine Sales Share in 2016
Figure South America Top 5 Players Serine Sales Share in 2017
Table South America Top 5 Players Serine Revenue in 2016 and 2017
Table South America Top 5 Players Serine Revenue Market Share (%) in 2016 and 2017
Figure South America Top 5 Players Serine Revenue Share in 2016
Figure South America Top 5 Players Serine Revenue Share in 2017
Table South America Serine Sales by Type (2013-2018)
Figure South America Serine Sales by Type in 2017
Table South America Serine Sales Market Share by Type (2013-2018)
Figure South America Serine Sales Market Share by Type (2013-2018)
Table South America Serine Revenue by Type (2013-2018)
Figure South America Serine Revenue by Type in 2017
Table South America Serine Revenue Market Share by Type (2013-2018)

Figure South America Serine Revenue Market Share by Type (2013-2018)
Table South America Serine Price by Type (2013-2018)
Table South America Serine Sales by Application (2013-2018)
Figure South America Serine Sales by Application in 2017
Table South America Serine Sales Market Share by Application (2013-2018)
Figure South America Serine Sales Market Share by Application (2013-2018)
Table South America Serine Sales by Country (2013-2018)
Figure South America Serine Sales by Country in 2017
Table South America Serine Sales Market Share by Country (2013-2018)
Figure South America Serine Sales Market Share by Country (2013-2018)
Table South America Serine Import & Export (2013-2018)
Table Middle East & Africa Top 5 Players Serine Sales in 2016 and 2017
Table Middle East & Africa Top 5 Players Serine Sales Market Share (%) in 2016 and 2017
Figure Middle East & Africa Top 5 Players Serine Sales Share in 2016
Figure Middle East & Africa Top 5 Players Serine Sales Share in 2017
Table Middle East & Africa Top 5 Players Serine Revenue in 2016 and 2017
Table Middle East & Africa Top 5 Players Serine Revenue Market Share (%) in 2016 and 2017
Figure Middle East & Africa Top 5 Players Serine Revenue Share in 2016
Figure Middle East & Africa Top 5 Players Serine Revenue Share in 2017
Table Middle East & Africa Serine Sales by Type (2013-2018)
Figure Middle East & Africa Serine Sales by Type in 2017
Table Middle East & Africa Serine Sales Market Share by Type (2013-2018)
Figure Middle East & Africa Serine Sales Market Share by Type (2013-2018)
Table Middle East & Africa Serine Revenue by Type (2013-2018)
Figure Middle East & Africa Serine Revenue by Type in 2017
Table Middle East & Africa Serine Revenue Market Share by Type (2013-2018)
Figure Middle East & Africa Serine Revenue Market Share by Type (2013-2018)
Table Middle East & Africa Serine Price by Type (2013-2018)
Table Middle East & Africa Serine Sales by Application (2013-2018)
Figure Middle East & Africa Serine Sales by Application in 2017
Table Middle East & Africa Serine Sales Market Share by Application (2013-2018)
Figure Middle East & Africa Serine Sales Market Share by Application (2013-2018)
Table Middle East & Africa Serine Sales by Country (2013-2018)
Figure Middle East & Africa Serine Sales by Country in 2017
Table Middle East & Africa Serine Sales Market Share by Country (2013-2018)
Figure Middle East & Africa Serine Sales Market Share by Country (2013-2018)
Table Middle East & Africa Serine Import & Export (2013-2018)

Table Ajinomoto Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Ajinomoto Serine Sales, Revenue, Price and Gross Margin (2013-2018)

Figure Ajinomoto Serine Market Share (2013-2018)

Table Evonik Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Evonik Serine Sales, Revenue, Price and Gross Margin (2013-2018)

Figure Evonik Serine Market Share (2013-2018)

Table KYOWA Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table KYOWA Serine Sales, Revenue, Price and Gross Margin (2013-2018)

Figure KYOWA Serine Market Share (2013-2018)

Table Mitsui Chemicals Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Mitsui Chemicals Serine Sales, Revenue, Price and Gross Margin (2013-2018)

Figure Mitsui Chemicals Serine Market Share (2013-2018)

Table Amino Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Amino Serine Sales, Revenue, Price and Gross Margin (2013-2018)

Figure Amino Serine Market Share (2013-2018)

Table Puyer Biopharma Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Wuxi Jinghai Amino Acid Serine Sales, Revenue, Price and Gross Margin (2013-2018)

Figure Wuxi Jinghai Amino Acid Serine Market Share (2013-2018)

Table Puyer Biopharma Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Puyer Biopharma Serine Sales, Revenue, Price and Gross Margin (2013-2018)

Figure Puyer Biopharma Serine Market Share (2013-2018)

Table Bafeng Pharmaceutical Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Bafeng Pharmaceutical Serine Sales, Revenue, Price and Gross Margin (2013-2018)

Figure Bafeng Pharmaceutical Serine Market Share (2013-2018)

Table Jiahe Biotech Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Jiahe Biotech Serine Sales, Revenue, Price and Gross Margin (2013-2018)

Figure Jiahe Biotech Serine Market Share (2013-2018)

Table Hua Yang Chemical Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Hua Yang Chemical Serine Sales, Revenue, Price and Gross Margin (2013-2018)

Figure Hua Yang Chemical Serine Market Share (2013-2018)

Figure Global Serine Sales and Growth Rate Forecast (2018-2023)
Figure Global Serine Revenue and Growth Rate Forecast (2018-2023)
Table Global Serine Sales Forecast by Regions (2018-2023)
Table Global Serine Sales Market Share Forecast by Regions (2018-2023)
Table Global Serine Sales Forecast by Type (2018-2023)
Table Global Serine Sales Market Share Forecast by Type (2018-2023)
Table Global Serine Sales Forecast by Application (2018-2023)
Table Global Serine Sales Market Share Forecast by Application (2018-2023)
Table Sales Base and Market Concentration Rate of Raw Material
Figure Price Trend of Key Raw Materials
Table Key Suppliers of Raw Materials
Figure Manufacturing Cost Structure of Serine
Figure Manufacturing Process Analysis of Serine
Figure Serine Industrial Chain Analysis
Table Raw Materials Sources of Serine Major Players in 2017
Table Major Buyers of Serine
Table Distributors/Traders List

I would like to order

Product name: 2018 Top 5 Serine Players in North America, Europe, Asia-Pacific, South America, Middle East and Africa

Product link: <https://marketpublishers.com/r/2D39C3AA1CCEN.html>

Price: US\$ 4,960.00 (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/2D39C3AA1CCEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970

