

# Global Zeolites Market – Products and Applications

https://marketpublishers.com/r/G5480A3E7539EN.html

Date: October 2022

Pages: 452

Price: US\$ 4,500.00 (Single User License)

ID: G5480A3E7539EN

## **Abstracts**

#### **REPORT SYNOPSIS**

Zeolites are most widely used in the production of detergents, with other major applications for the materials being building & construction, water and wastewater treatment and oil refining & petrochemicals. Of the two types of zeolites, the demand for the natural variety is marginally larger, though the market for synthetic zeolites is likely to grow at a faster rate. These materials are widely used as builders in detergents as fluid catalytic cracking (FCC) catalysts in the petroleum industry and as adsorbents/desiccants in the construction, natural gas and environmental sectors.

Zeolites industry is adversely impacted by Covid-19 and Russia-Ukraine war and other negative global developments over the short term period, prospects for the longer term augur well, considering the important role played by these products across a spectrum of application areas and industries.

Detergents and Building & Construction constitute the principal applications for Zeolites, the global demand for which is estimated at US\$3.1 billion each in 2022 while the worldwide market for Zeolites in Building & Construction applications is likely to log the fastest growth during 2022-2027 and becomes the largest application for Zeolites by 2027.

#### Research Findings & Coverage

This global market research report on Zeolites analyzes the market with respect to product types/sub-types and applications

Zeolites market size is estimated/projected in this report by product type/subtype and by application across all major countries



Copper-Exchanged Zeolites Enable Efficient Direct Conversion of Methane into Methanol

Zeolites Being Used Widely in Removing Heavy Metals from Industrial Wastewater

Layered Zeolites Gaining Wider Attention

Zeolites Come to the Fore in Air Pollution Remediation

Key business trends focusing on product innovations/developments, M&As, JVs and other recent industry developments

Major companies profiled – 55

The industry guide includes the contact details for 138 companies

#### PRODUCT OUTLINE

The market for product types/sub-types of Zeolites studied in this report comprise the following:

Natural Zeolites

Clinoptilolite

Other Natural Zeolites

Synthetic Zeolites

Type A

Type X

Type Y

USY



#### ZSM-5

The report anal	vzes the	market for	the fo	ollowina	application	sectors	of Zeolites:

Agriculture

**Animal Feed** 

**Building & Construction** 

Detergents

Oil Refining & Petrochemicals

Water & Wastewater Treatment

Other Applications

## Analysis Period, Units and Growth Rates

The report reviews, analyzes and projects the global Zeolites market for the period 2018-2027 in terms of value in US\$; and the compound annual growth rates (CAGRs) projected from 2022 through 2027.

## Geographic Coverage

North America (The United States and Mexico)

Europe (France, Germany, Italy, Russia, Spain, the United Kingdom and Rest of Europe)

Asia-Pacific (China, India, Japan, South Korea and Rest of Asia-Pacific)

South America (Argentina, Brazil and Rest of South America)



Middle East & Africa



## **Contents**

#### PART A: GLOBAL MARKET PERSPECTIVE

#### 1. INTRODUCTION

- 1.1 Product Outline
  - 1.1.1 An Overview of Zeolites
    - 1.1.1.1 Structure of Zeolites
      - 1.1.1.1 Pore Structure
    - 1.1.1.2 Properties of Zeolites
      - 1.1.1.2.1 Ion Exchange
      - 1.1.1.2.2 Catalysis
      - 1.1.1.2.3 Adsorption
    - 1.1.1.3 Natural Zeolites
      - 1.1.1.3.1 Clinoptilolite
      - 1.1.1.3.1.1 Synthesis of Clinoptilolite
      - 1.1.1.3.2 Other Natural Zeolites
        - 1.1.1.3.2.1 Chabazite
        - 1.1.1.3.2.2 Stilbite
        - 1.1.1.3.2.3 Analcime
      - 1.1.1.3.2.4 Laumontite
    - 1.1.1.4 Synthetic Zeolites
      - 1.1.1.4.1 A Brief History
      - 1.1.1.4.2 Overview
      - 1.1.1.4.3 Synthesis of Zeolites
      - 1.1.1.4.3.1 Zeolite A (LTA)
      - 1.1.1.4.3.2 Zeolites X, Y and USY
      - 1.1.1.4.3.3 Zeolite ZSM-5 (MFI)

#### 2. APPLICATIONS OF ZEOLITES

- 2.1 Agriculture
  - 2.1.1 Fertilizer and Soil Amendment
  - 2.1.2 Pesticides, Fungicides and Herbicides
  - 2.1.3 Traps for Heavy Metals
- 2.2 Animal Feed
- 2.3 Building & Construction
- 2.4 Detergents



- 2.4.1 Chemistry and Structure of Zeolites for Detergents
- 2.4.2 Detergents Builders: Functions and History
- 2.4.3 Laundering Process and Zeolites
- 2.4.4 Zeolites in Detergent Manufacture
- 2.5 Oil Refining & Petrochemicals
  - 2.5.1 Oil Refining Catalyst
  - 2.5.2 Light Olefin Separation
- 2.6 Water & Wastewater Treatment
  - 2.6.1 Industrial Wastewater
  - 2.6.2 Municipal Wastewater
  - 2.6.3 Drinking Water
- 2.7 Other Applications
  - 2.7.1 Gas Purification and Separation
  - 2.7.2 Medicine

#### 3. KEY MARKET TRENDS

- 3.1 Layered Zeolites Gaining Wider Attention
- 3.2 Zeolite-Supported Metal Catalysts Used as an Advanced Technology in Propane Dehydrogenation
- 3.3 Copper-Exchanged Zeolites Enable Efficient Direct Conversion of Methane into Methanol
- 3.4 Zeolites Being Used as Adsorbents for Controlling Body Odor
- 3.5 Zeolites Being Used Widely in Removing Heavy Metals from Industrial Wastewater
- 3.6 Green Synthesis of Microporous and Hierarchical Zeolites Gaining Momentum
- 3.7 Novel Methods Developed for Synthesis of Zeolites
- 3.8 Zeolites Show their Versatility in Sustainable Chemistry
- 3.9 Zeolites Come to the Fore in Air Pollution Remediation
- 3.10 Purified Water Achieved with Innovative Zeolites

#### 4. KEY GLOBAL PLAYERS

Albemarle Corporation (United States)

ANTEN Chemical Co., Ltd. (China)

Arkema SA (France)

Axens SA (France)

BASF SE (Germany)

Bear River Zeolite Co. (United States)

Blue Pacific Minerals Ltd. (New Zealand)



Calgon Carbon Corporation (United States)

Chalco Shandong Advanced Material Co Ltd (China)

Chemiewerk Bad K?stritz GmbH (CWK) (Germany)

Clariant AG (Switzerland)

DP Transcarpathian Zeolite Plant (Ukraine)

Eurecat SA (France)

Gordes Zeolite (Turkey)

Honeywell UOP (United States)

International Zeolite Corp. (Canada)

IQE Group (Spain)

JGC Catalysts and Chemicals Ltd. (JGC C&C) (Japan)

Johnson Matthey (United Kingdom)

KMI Zeolite Inc. (United States)

KNT Group (Russia)

Milliporesigma (United States)

National Aluminium Company Limited (Nalco) (India)

Ningbo Jiahe New Materials Technology Co Ltd (China)

PQ Corporation (United States)

PT. D&W Internasional (Indonesia)

Rota Madencilik As - Rota Mining Corp. (Turkey)

Sachem Inc. (United States)

Showa Denko K.K. (Japan)

Sinopec Shanghai Research Institute of Petrochemical Technology (Sript) (China)

Sorbead India (India)

St. Cloud Mining Company (United States)

Teague Mineral Products (United States)

Tosoh Corporation (Japan)

W. R. Grace & Co.-Conn. (United States)

Zeocel Portugal Lda. (Portugal)

Zeochem AG (Switzerland)

Zeotech Corporation (United States)

Zhengzhou Fulong New Materials Technology Co. Ltd. (China)

#### 5. KEY BUSINESS & PRODUCT TRENDS

Albemarle Recognized by American Chemistry Council with Eight Responsible Care Awards

Reduce Pet Smells Over Summer Months

Clariant wins major contracts to supply petrochemical catalysts for China's Lihuayi



## Group

International Zeolite Signs Groundbreaking Agricultural Nutrient Technology Transfer Agreement

Albemarle Announces Global Price Increase for Catalyst Products

W. R. Grace & Co. - ART's ICR 450 Technology Wins Hydrocarbon Processing Award for Best Catalyst Technology

International Zeolite Partners with Academia to Validate Disruptive Commercial Agricultural Products

W. R. Grace & Co. - Standard Industries Completes Acquisition of Grace

New Way To Manage Nitrogen For Better Crops | Blue Pacific Minerals

W. R. Grace & Co. - Grace Announces 2021 FCC Catalysts Pricing Actions

W. R. Grace & Co. - Bapco Awards the Largest Catalyst Management Agreement in its History to ART for its Resid Hydrocracking Catalyst

IQE obtains the SiOLITE Trademark Registration Certificate in Eu

BASF introduces Altrium Fluidized Catalytic Cracking (FCC) catalyst to increase transportation fuel yields

Advanced Molecular Sieve for Cryogenic Air Separation Achieves 20% Higher Capacity

#### 6. GLOBAL MARKET OVERVIEW

- 6.1 Global Zeolites Market Overview by Product Type
  - 6.1.1 Global Natural Zeolites Market Overview by Product Sub-Type
    - 6.1.1.1 Natural Zeolites Market Overview by Global Region
    - 6.1.1.1.1 Natural Zeolites Sub-Type Market Overview of by Global Region
      - 6.1.1.1.1 Clinoptilolite
      - 6.1.1.1.2 Other Natural Zeolites
  - 6.1.2 Global Synthetic Zeolites Market Overview by Product Sub-Type
    - 6.1.2.1 Synthetic Zeolites Market Overview by Global Region
      - 6.1.2.1.1 Synthetic Zeolites Sub-Type Market Overview of by Global Region
        - 6.1.2.1.1.1 Type A Synthetic Zeolites
        - 6.1.2.1.1.2 Type X Synthetic Zeolites
        - 6.1.2.1.1.3 Type Y Synthetic Zeolites
        - 6.1.2.1.1.4 USY Synthetic Zeolites
        - 6.1.2.1.1.5 ZSM-5 Synthetic Zeolites
- 6.2 Global Zeolites Market Overview by Application
  - 6.2.1 Zeolites Applications Market Overview by Global Region
    - 6.2.1.1 Agriculture
    - 6.2.1.2 Animal Feed
    - 6.2.1.3 Building & Construction



- 6.2.1.4 Detergents
- 6.2.1.5 Oil Refining & Petrochemicals
- 6.2.1.6 Water & Wastewater Treatment
- 6.2.1.7 Other Applications

#### PART B: REGIONAL MARKET PERSPECTIVE

#### REGIONAL MARKET OVERVIEW

#### 7. NORTH AMERICA

- 7.1 North American Zeolites Market Overview by Geographic Region
- 7.2 North American Zeolites Market Overview by Product Type
- 7.2.1 North American Natural Zeolites Market Overview by Sub-Type
- 7.2.2 North American Synthetic Zeolites Market Overview by Sub-Type
- 7.3 North American Zeolites Market Overview by Application
- 7.4 Major Market Players

Albemarle Corporation (United States)

Bear River Zeolite Co. (United States)

Calgon Carbon Corporation (United States)

Graver Technologies, LLC (United States)

Hengye Inc. (United States)

Honeywell UOP (United States)

Ida-Ore Zeolite (United States)

International Zeolite Corp. (Canada)

Interra Global (United States)

KMI Zeolite Inc. (United States)

Milliporesigma (United States)

PQ Corporation (United States)

Sachem Inc. (United States)

St. Cloud Mining Company (United States)

Teague Mineral Products (United States)

W. R. Grace & Co.-Conn. (United States)

Zeolyst International (United States)

Zeomex (Mexico)

Zeotech Corporation (United States)

7.5 Country-wise Analysis of North American Zeolites Market

7.5.1 The United States

7.5.1.1 United States Zeolites Market Overview by Product Type



- 7.5.1.1.1 United States Natural Zeolites Market Overview by Sub-Type
- 7.5.1.1.2 United States Synthetic Zeolites Market Overview by Sub-Type
- 7.5.1.2 United States Zeolites Market Overview by Application
- 7.5.2 Canada
- 7.5.2.1 Canadian Zeolites Market Overview by Product Type
  - 7.5.2.1.1 Canadian Natural Zeolites Market Overview by Sub-Type
  - 7.5.2.1.2 Canadian Synthetic Zeolites Market Overview by Sub-Type
- 7.5.2.2 Canadian Zeolites Market Overview by Application
- 7.5.3 Mexico
  - 7.5.3.1 Mexican Zeolites Market Overview by Product Type
    - 7.5.3.1.1 Mexican Natural Zeolites Market Overview by Sub-Type
    - 7.5.3.1.2 Mexican Synthetic Zeolites Market Overview by Sub-Type
  - 7.5.3.2 Mexican Zeolites Market Overview by Application

#### 8. EUROPE

- 8.1 European Zeolites Market Overview by Geographic Region
- 8.2 European Zeolites Market Overview by Product Type
- 8.2.1 European Natural Zeolites Market Overview by Sub-Type
- 8.2.2 European Synthetic Zeolites Market Overview by Sub-Type
- 8.3 European Zeolites Market Overview by Application
- 8.4 Major Market Players

Arkema SA (France)

Axens SA (France)

BASF SE (Germany)

Chemiewerk Bad K?stritz GmbH (CWK) (Germany)

Clariant AG (Switzerland)

DP 'Transcarpathian Zeolite Plant' (Ukraine)

Eurecat SA (France)

G. Apostolico & C. Tanagro Snc (Italy)

Gordes Zeolite (Turkey)

IQE Group (Spain)

Johnson Matthey (United Kingdom)

KNT Group (Russia)

Lenntech BV (The Netherlands)

Rota Madencilik AS - Rota Mining Corp. (Turkey)

Silkem, D.O.O. (Slovenia)

Zeocel Portugal Lda. (Portugal)

Zeocem, A.S. (Slovak Republic)



## Zeochem AG (Switzerland)

- 8.5 Country-wise Analysis of European Zeolites Market
  - 8.5.1 France
    - 8.5.1.1 French Zeolites Market Overview by Product Type
      - 8.5.1.1.1 French Natural Zeolites Market Overview by Sub-Type
    - 8.5.1.1.2 French Synthetic Zeolites Market Overview by Sub-Type
  - 8.5.1.2 French Zeolites Market Overview by Application
  - 8.5.2 Germany
    - 8.5.2.1 German Zeolites Market Overview by Product Type
      - 8.5.2.1.1 German Natural Zeolites Market Overview by Sub-Type
      - 8.5.2.1.2 German Synthetic Zeolites Market Overview by Sub-Type
    - 8.5.2.2 German Zeolites Market Overview by Application
  - 8.5.3 Italy
    - 8.5.3.1 Italian Zeolites Market Overview by Product Type
    - 8.5.3.1.1 Italian Natural Zeolites Market Overview by Sub-Type
    - 8.5.3.1.2 Italian Synthetic Zeolites Market Overview by Sub-Type
    - 8.5.3.2 Italian Zeolites Market Overview by Application
  - 8.5.4 Russia
  - 8.5.4.1 Russian Zeolites Market Overview by Product Type
    - 8.5.4.1.1 Russian Natural Zeolites Market Overview by Sub-Type
    - 8.5.4.1.2 Russian Synthetic Zeolites Market Overview by Sub-Type
  - 8.5.4.2 Russian Zeolites Market Overview by Application
  - 8.5.5 Spain
    - 8.5.5.1 Spanish Zeolites Market Overview by Product Type
      - 8.5.5.1.1 Spanish Natural Zeolites Market Overview by Sub-Type
    - 8.5.5.1.2 Spanish Synthetic Zeolites Market Overview by Sub-Type
    - 8.5.5.2 Spanish Zeolites Market Overview by Application
  - 8.5.6 The United Kingdom
    - 8.5.6.1 United Kingdom Zeolites Market Overview by Product Type
      - 8.5.6.1.1 United Kingdom Natural Zeolites Market Overview by Sub-Type
    - 8.5.6.1.2 United Kingdom Synthetic Zeolites Market Overview by Sub-Type
    - 8.5.6.2 United Kingdom Zeolites Market Overview by Application
  - 8.5.7 Rest of Europe
    - 8.5.7.1 Rest of Europe Zeolites Market Overview by Product Type
      - 8.5.7.1.1 Rest of Europe Natural Zeolites Market Overview by Sub-Type
      - 8.5.7.1.2 Rest of Europe Synthetic Zeolites Market Overview by Sub-Type
    - 8.5.7.2 Rest of Europe Zeolites Market Overview by Application

## 9. ASIA-PACIFIC



- 9.1 Asia-Pacific Zeolites Market Overview by Geographic Region
- 9.2 Asia-Pacific Zeolites Market Overview by Product Type
- 9.2.1 Asia-Pacific Natural Zeolites Market Overview by Sub-Type
- 9.2.2 Asia-Pacific Synthetic Zeolites Market Overview by Sub-Type
- 9.3 Asia-Pacific Zeolites Market Overview by Application
- 9.4 Major Market Players

Anten Chemical Co., Ltd. (China)

Blue Pacific Minerals Ltd. (New Zealand)

CHALCO Shandong Advanced Material Co., Ltd (China)

Gujarat Credo Mineral Industries Ltd (India)

Gujarat Multi Gas Base Chemicals Pvt. Ltd. (India)

JGC Catalysts and Chemicals Ltd. (JGC C&C) (Japan)

Jiangxi Xintao Technology Co., Ltd (China)

Manek Group (India)

National Aluminium Company Limited (Nalco) (India)

Ningbo Jiahe New Materials Technology Co., Ltd (China)

PT. D&W Internasional (Indonesia)

Showa Denko K.K. (Japan)

Union Showa K. K. (USKK) (Japan)

Sinopec Shanghai Research Institute of Petrochemical Technology (SRIPT) (China)

Sorbead India (India)

Tosoh Corporation (Japan)

Zeolites and Allied Products Pvt. Ltd. (India)

Zhengzhou Fulong New Materials Technology Co. Ltd. (China)

- 9.5 Country-wise Analysis of Asia-Pacific Zeolites Market
  - 9.5.1 China
    - 9.5.1.1 Chinese Zeolites Market Overview by Product Type
    - 9.5.1.1.1 Chinese Natural Zeolites Market Overview by Sub-Type
    - 9.5.1.1.2 Chinese Synthetic Zeolites Market Overview by Sub-Type
  - 9.5.1.2 Chinese Zeolites Market Overview by Application
  - 9.5.2 India
    - 9.5.2.1 Indian Zeolites Market Overview by Product Type
      - 9.5.2.1.1 Indian Natural Zeolites Market Overview by Sub-Type
      - 9.5.2.1.2 Indian Synthetic Zeolites Market Overview by Sub-Type
    - 9.5.2.2 Indian Zeolites Market Overview by Application
  - 9.5.3 Japan
    - 9.5.3.1 Japanese Zeolites Market Overview by Product Type
      - 9.5.3.1.1 Japanese Natural Zeolites Market Overview by Sub-Type



- 9.5.3.1.2 Japanese Synthetic Zeolites Market Overview by Sub-Type
- 9.5.3.2 Japanese Zeolites Market Overview by Application
- 9.5.4 South Korea
  - 9.5.4.1 South Korean Zeolites Market Overview by Product Type
    - 9.5.4.1.1 South Korean Natural Zeolites Market Overview by Sub-Type
  - 9.5.4.1.2 South Korean Synthetic Zeolites Market Overview by Sub-Type
- 9.5.4.2 South Korean Zeolites Market Overview by Application
- 9.5.5 Rest of Asia-Pacific
  - 9.5.5.1 Rest of Asia-Pacific Zeolites Market Overview by Product Type
  - 9.5.5.1.1 Rest of Asia-Pacific Natural Zeolites Market Overview by Sub-Type
  - 9.5.5.1.2 Rest of Asia-Pacific Synthetic Zeolites Market Overview by Sub-Type
  - 9.5.5.2 Rest of Asia-Pacific Zeolites Market Overview by Application

## 10. SOUTH AMERICA

- 10.1 South American Zeolites Market Overview by Geographic Region
- 10.2 South American Zeolites Market Overview by Product Type
- 10.2.1 South American Natural Zeolites Market Overview by Sub-Type
- 10.2.2 South American Synthetic Zeolites Market Overview by Sub-Type
- 10.3 South American Zeolites Market Overview by Application
- 10.4 Country-wise Analysis of South American Zeolites Market
- 10.4.1 Argentina
  - 10.4.1.1 Argentine Zeolites Market Overview by Product Type
    - 10.4.1.1.1 Argentine Natural Zeolites Market Overview by Sub-Type
    - 10.4.1.1.2 Argentine Synthetic Zeolites Market Overview by Sub-Type
  - 10.4.1.2 Argentine Zeolites Market Overview by Application
- 10.4.2 Brazil
  - 10.4.2.1 Brazilian Zeolites Market Overview by Product Type
    - 10.4.2.1.1 Brazilian Natural Zeolites Market Overview by Sub-Type
    - 10.4.2.1.2 Brazilian Synthetic Zeolites Market Overview by Sub-Type
  - 10.4.2.2 Brazilian Zeolites Market Overview by Application
- 10.4.3 Rest of South America
  - 10.4.3.1 Rest of South American Zeolites Market Overview by Product Type
    - 10.4.3.1.1 Rest of South American Natural Zeolites Market Overview by Sub-Type
    - 10.4.3.1.2 Rest of South American Synthetic Zeolites Market Overview by Sub-Type
  - 10.4.3.2 Rest of South American Zeolites Market Overview by Application

#### 11. MIDDLE EAST & AFRICA



- 11.1 Middle East & Africa Zeolites Market Overview by Product Type
  - 11.1.1 Middle East & Africa Natural Zeolites Market Overview by Sub-Type
- 11.1.2 Middle East & Africa Synthetic Zeolites Market Overview by Sub-Type
- 11.2 Middle East & Africa Zeolites Market Overview by Application

#### PART C: GUIDE TO THE INDUSTRY

- 1. NORTH AMERICA
- 2. EUROPE
- 3. ASIA-PACIFIC
- 4. REST OF WORLD

**PART D: ANNEXURE** 

- 1. RESEARCH METHODOLOGY
- 2. FEEDBACK

#### **CHARTS & GRAPHS**

PART A: GLOBAL MARKET PERSPECTIVE

Chart 1: Global Zeolites Market Analysis (2019, 2022 & 2027) by Product Type

Chart 2: Global Natural Zeolites Market Analysis (2019, 2022 & 2026) by Product Sub-Type

Chart 3: Global Synthetic Zeolites Market Analysis (2019, 2022 & 2027) by Product Sub-Type

Chart 4: Global Zeolites Market Analysis (2019, 2022 & 2026) by Application

Chart 5: Global Zeolites Market Analysis (2018-2027) in USD Million

Chart 6: Global Zeolites Market Analysis (2018-2027) by Product Type – Natural

Zeolites and Synthetic Zeolites in USD Million

Chart 7: Glance at 2019, 2022 and 2027 Global Zeolites Market Share (%) by Product

Type – Natural Zeolites and Synthetic Zeolites

Chart 8: Global Natural Zeolites Market Analysis (2018-2027) by Product Sub-Type –

Clinoptilolite and Other Natural Zeolites in USD Million

Chart 9: Glance at 2019, 2022 and 2027 Global Natural Zeolites Market Share (%) by

Product Sub-Type – Clinoptilolite and Other Natural Zeolites



Chart 10: Global Natural Zeolites Market Analysis (2018-2027) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 11: Glance at 2019, 2022 and 2027 Global Natural Zeolites Market Share (%) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

Chart 12: Global Clinoptilolite Market Analysis (2018-2027) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 13: Glance at 2019, 2022 and 2027 Global Clinoptilolite Market Share (%) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

Chart 14: Global Other Natural Zeolites Market Analysis (2018-2027) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 15: Glance at 2019, 2022 and 2027 Global Other Natural Zeolites Market Share (%) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

Chart 16: Global Synthetic Zeolites Market Analysis (2018-2027) by Product Sub-Type – Type A, Type X, Type Y, USY and ZSM-5 in USD Million

Chart 17: Glance at 2019, 2022 and 2027 Global Synthetic Zeolites Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 18: Global Synthetic Zeolites Market Analysis (2018-2027) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 19: Glance at 2019, 2022 and 2027 Global Synthetic Zeolites Market Share (%) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

Chart 20: Global Type A Synthetic Zeolites Market Analysis (2018-2027) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 21: Glance at 2019, 2022 and 2027 Global Type A Synthetic Zeolites Market Share (%) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

Chart 22: Global Type X Synthetic Zeolites Market Analysis (2018-2027) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 23: Glance at 2019, 2022 and 2027 Global Type X Synthetic Zeolites Market Share (%) by Geographic Region – North America, Europe, Asia-Pacific, South America



and Middle East & Africa

Chart 24: Global Type Y Synthetic Zeolites Market Analysis (2018-2027) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 25: Glance at 2019, 2022 and 2027 Global Type Y Synthetic Zeolites Market Share (%) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

Chart 26: Global USY Synthetic Zeolites Market Analysis (2018-2027) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 27: Glance at 2019, 2022 and 2027 Global USY Synthetic Zeolites Market Share (%) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

Chart 28: Global ZSM-5 Synthetic Zeolites Market Analysis (2018-2027) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 29: Glance at 2019, 2022 and 2027 Global ZSM-5 Synthetic Zeolites Market Share (%) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

Chart 30: Global Zeolites Market Analysis (2018-2027) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million

Chart 31: Glance at 2019, 2022 and 2027 Global Synthetic Zeolites Market Share (%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications Chart 32: Global Zeolites Market Analysis (2018-2027) in Agriculture Applications by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 33: Glance at 2019, 2022 and 2027 Global Zeolites Market Share (%) in Agriculture Applications by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

Chart 34: Global Zeolites Market Analysis (2018-2027) in Animal Feed Applications by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 35: Glance at 2019, 2022 and 2027 Global Zeolites Market Share (%) in Animal Feed Applications by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

Chart 36: Global Zeolites Market Analysis (2018-2027) in Building & Construction Applications by Geographic Region – North America, Europe, Asia-Pacific, South



America and Middle East & Africa in USD Million

Chart 37: Glance at 2019, 2022 and 2027 Global Zeolites Market Share (%) in Building & Construction Applications by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

Chart 38: Global Zeolites Market Analysis (2018-2027) in Detergent Applications by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 39: Glance at 2019, 2022 and 2027 Global Zeolites Market Share (%) in Detergent Applications by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

Chart 40: Global Zeolites Market Analysis (2018-2027) in Oil Refining & Petrochemical Applications by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 41: Glance at 2019, 2022 and 2027 Global Zeolites Market Share (%) in Oil Refining & Petrochemical Applications by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

Chart 42: Global Zeolites Market Analysis (2018-2027) in Water & Wastewater Treatment Applications by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 43: Glance at 2019, 2022 and 2027 Global Zeolites Market Share (%) in Water & Wastewater Treatment Applications by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

Chart 44: Global Zeolites Market Analysis (2018-2027) in Other Applications by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million

Chart 45: Glance at 2019, 2022 and 2027 Global Zeolites Market Share (%) in Other Applications by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

PART B: REGIONAL MARKET PERSPECTIVE

Chart 46: Global Zeolites Market Analysis (2018-2027) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa in USD Million Chart 47: Glance at 2019, 2022 and 2027 Global Zeolites Market Share (%) by Geographic Region – North America, Europe, Asia-Pacific, South America and Middle East & Africa

REGIONAL MARKET OVERVIEW

NORTH AMERICA

Chart 48: North American Zeolites Market Analysis (2018-2027) in USD Million Chart 49: North American Zeolites Market Analysis (2018-2027) by Geographic Region – United States, Canada and Mexico in USD Million



Chart 50: Glance at 2019, 2022 and 2027 North American Zeolites Market Share (%) by Geographic Region – United States, Canada and Mexico

Chart 51: North American Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 52: Glance at 2019, 2022 and 2027 North American Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 53: North American Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 54: Glance at 2019, 2022 and 2027 North American Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 55: North American Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type Y, USY and ZSM-5 in USD Million

Chart 56: Glance at 2019, 2022 and 2027 North American Synthetic Zeolites Market Share (%) by Product Type – Type A, Type Y, USY and ZSM-5

Chart 57: North American Zeolites Market Analysis (2018-2027) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million Chart 58: Glance at 2019, 2022 and 2027 North American Synthetic Zeolites Market

Share (%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other

The United States

**Applications** 

Chart 59: United States Zeolites Market Analysis (2018-2027) in USD Million

Chart 60: United States Zeolites Market Analysis (2018-2027) by Product Type -

Natural Zeolites and Synthetic Zeolites in USD Million

Chart 61: Glance at 2019, 2022 and 2027 United States Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 62: United States Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 63: Glance at 2019, 2022 and 2027 United States Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 64: United States Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type Y, USY and ZSM-5 in USD Million

Chart 65: Glance at 2019, 2022 and 2027 United States Synthetic Zeolites Market Share (%) by Product Type – Type A, Type Y, USY and ZSM-5

Chart 66: United States Zeolites Market Analysis (2018-2027) by Application -

Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining &

Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million

Chart 67: Glance at 2019, 2022 and 2027 United States Synthetic Zeolites Market



Share (%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications

Canada

Chart 68: Canadian Zeolites Market Analysis (2018-2027) in USD Million

Chart 69: Canadian Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 70: Glance at 2019, 2022 and 2027 Canadian Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 71: Canadian Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 72: Glance at 2019, 2022 and 2027 Canadian Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 73: Canadian Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type Y, USY and ZSM-5 in USD Million

Chart 74: Glance at 2019, 2022 and 2027 Canadian Synthetic Zeolites Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 75: Canadian Zeolites Market Analysis (2018-2027) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million

Chart 76: Glance at 2019, 2022 and 2027 Canadian Synthetic Zeolites Market Share (%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications Mexico

Chart 77: Mexican Zeolites Market Analysis (2018-2027) in USD Million

Chart 78: Mexican Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 79: Glance at 2019, 2022 and 2027 Mexican Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 80: Mexican Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 81: Glance at 2019, 2022 and 2027 Mexican Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 82: Mexican Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type Y, USY and ZSM-5 in USD Million

Chart 83: Glance at 2019, 2022 and 2027 Mexican Synthetic Zeolites Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 84: Mexican Zeolites Market Analysis (2018-2027) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals,



Water & Wastewater Treatment and Other Applications in USD Million

Chart 85: Glance at 2019, 2022 and 2027 Mexican Synthetic Zeolites Market Share (%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications EUROPE

Chart 86: European Zeolites Market Analysis (2018-2027) in USD Million

Chart 87: European Zeolites Market Analysis (2018-2027) by Geographic Region – France, Germany, Italy, Russia, Spain, United Kingdom and Rest of Europe in USD Million

Chart 88: Glance at 2019, 2022 and 2027 European Zeolites Market Share (%) by Geographic Region – France, Germany, Italy, Russia, Spain, United Kingdom and Rest of Europe

Chart 89: European Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 90: Glance at 2019, 2022 and 2027 European Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 91: European Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 92: Glance at 2019, 2022 and 2027 European Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 93: European Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type Y, USY and ZSM-5 in USD Million

Chart 94: Glance at 2019, 2022 and 2027 European Synthetic Zeolites Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 95: European Zeolites Market Analysis (2018-2027) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million

Chart 96: Glance at 2019, 2022 and 2027 European Synthetic Zeolites Market Share (%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications France

Chart 97: French Zeolites Market Analysis (2018-2027) in USD Million

Chart 98: French Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 99: Glance at 2019, 2022 and 2027 French Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 100: French Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 101: Glance at 2019, 2022 and 2027 French Natural Zeolites Market Share (%)



by Sub-Type - Clinoptilolite and Other Natural Zeolites

Chart 102: French Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type - Type

A, Type X, Type Y, USY and ZSM-5 in USD Million

Chart 103: Glance at 2019, 2022 and 2027 French Synthetic Zeolites Market Share (%)

by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 104: French Zeolites Market Analysis (2018-2027) by Application – Agriculture,

Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals,

Water & Wastewater Treatment and Other Applications in USD Million

Chart 105: Glance at 2019, 2022 and 2027 French Synthetic Zeolites Market Share (%)

by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil

Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications Germany

Chart 106: German Zeolites Market Analysis (2018-2027) in USD Million

Chart 107: German Zeolites Market Analysis (2018-2027) by Product Type – Natural

Zeolites and Synthetic Zeolites in USD Million

Chart 108: Glance at 2019, 2022 and 2027 German Zeolites Market Share (%) by

Product Type – Natural Zeolites and Synthetic Zeolites

Chart 109: German Natural Zeolites Market Analysis (2018-2027) by Sub-Type -

Clinoptilolite and Other Natural Zeolites in USD Million

Chart 110: Glance at 2019, 2022 and 2027 German Natural Zeolites Market Share (%)

by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 111: German Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type –

Type A, Type X, Type Y, USY and ZSM-5 in USD Million

Chart 112: Glance at 2019, 2022 and 2027 German Synthetic Zeolites Market Share

(%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 113: German Zeolites Market Analysis (2018-2027) by Application – Agriculture,

Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals,

Water & Wastewater Treatment and Other Applications in USD Million

Chart 114: Glance at 2019, 2022 and 2027 German Synthetic Zeolites Market Share

(%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil

Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications Italy

Chart 115: Italian Zeolites Market Analysis (2018-2027) in USD Million

Chart 116: Italian Zeolites Market Analysis (2018-2027) by Product Type – Natural

Zeolites and Synthetic Zeolites in USD Million

Chart 117: Glance at 2019, 2022 and 2027 Italian Zeolites Market Share (%) by Product

Type – Natural Zeolites and Synthetic Zeolites

Chart 118: Italian Natural Zeolites Market Analysis (2018-2027) by Sub-Type –

Clinoptilolite and Other Natural Zeolites in USD Million



Chart 119: Glance at 2019, 2022 and 2027 Italian Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 120: Italian Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type Y, USY and ZSM-5 in USD Million

Chart 121: Glance at 2019, 2022 and 2027 Italian Synthetic Zeolites Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 122: Italian Zeolites Market Analysis (2018-2027) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million

Chart 123: Glance at 2019, 2022 and 2027 Italian Synthetic Zeolites Market Share (%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications Russia

Chart 124: Russian Zeolites Market Analysis (2018-2027) in USD Million

Chart 125: Russian Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 126: Glance at 2019, 2022 and 2027 Russian Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 127: Russian Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 128: Glance at 2019, 2022 and 2027 Russian Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 129: Russian Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type Y, USY and ZSM-5 in USD Million

Chart 130: Glance at 2019, 2022 and 2027 Russian Synthetic Zeolites Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 131: Russian Zeolites Market Analysis (2018-2027) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million

Chart 132: Glance at 2019, 2022 and 2027 Russian Synthetic Zeolites Market Share (%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications Spain

Chart 133: Spanish Zeolites Market Analysis (2018-2027) in USD Million

Chart 134: Spanish Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 135: Glance at 2019, 2022 and 2027 Spanish Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 136: Spanish Natural Zeolites Market Analysis (2018-2027) by Sub-Type -



Clinoptilolite and Other Natural Zeolites in USD Million

Chart 137: Glance at 2019, 2022 and 2027 Spanish Natural Zeolites Market Share (%)

by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 138: Spanish Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type -

Type A, Type X, Type Y, USY and ZSM-5 in USD Million

Chart 139: Glance at 2019, 2022 and 2027 Spanish Synthetic Zeolites Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 140: Spanish Zeolites Market Analysis (2018-2027) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals,

Water & Wastewater Treatment and Other Applications in USD Million

Chart 141: Glance at 2019, 2022 and 2027 Spanish Synthetic Zeolites Market Share

(%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil

Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications The United Kingdom

Chart 142: United Kingdom Zeolites Market Analysis (2018-2027) in USD Million

Chart 143: United Kingdom Zeolites Market Analysis (2018-2027) by Product Type –

Natural Zeolites and Synthetic Zeolites in USD Million

Chart 144: Glance at 2019, 2022 and 2027 United Kingdom Zeolites Market Share (%)

by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 145: United Kingdom Natural Zeolites Market Analysis (2018-2027) by Sub-Type

- Clinoptilolite and Other Natural Zeolites in USD Million

Chart 146: Glance at 2019, 2022 and 2027 United Kingdom Natural Zeolites Market

Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 147: United Kingdom Synthetic Zeolites Market Analysis (2018-2027) by Sub-

Type – Type A, Type X, Type Y, USY and ZSM-5 in USD Million

Chart 148: Glance at 2019, 2022 and 2027 United Kingdom Synthetic Zeolites Market

Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 149: United Kingdom Zeolites Market Analysis (2018-2027) by Application –

Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining &

Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million

Chart 150: Glance at 2019, 2022 and 2027 United Kingdom Synthetic Zeolites Market

Share (%) by Application – Agriculture, Animal Feed, Building & Construction,

Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications

Rest of Europe

Chart 151: Rest of Europe Zeolites Market Analysis (2018-2027) in USD Million

Chart 152: Rest of Europe Zeolites Market Analysis (2018-2027) by Product Type –

Natural Zeolites and Synthetic Zeolites in USD Million

Chart 153: Glance at 2019, 2022 and 2027 Rest of Europe Zeolites Market Share (%)



by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 154: Rest of Europe Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 155: Glance at 2019, 2022 and 2027 Rest of Europe Natural Zeolites Market

Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 156: Rest of Europe Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type X, Type Y, USY and ZSM-5 in USD Million

Chart 157: Glance at 2019, 2022 and 2027 Rest of Europe Synthetic Zeolites Market

Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 158: Rest of Europe Zeolites Market Analysis (2018-2027) by Application –

Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining &

Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million

Chart 159: Glance at 2019, 2022 and 2027 Rest of Europe Synthetic Zeolites Market

Share (%) by Application – Agriculture, Animal Feed, Building & Construction,

Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications

#### **ASIA-PACIFIC**

Chart 160: Asia-Pacific Zeolites Market Analysis (2018-2027) in USD Million

Chart 161: Asia-Pacific Zeolites Market Analysis (2018-2027) by Geographic Region –

China, India, Japan, South Korea and Rest of Asia-Pacific in USD Million

Chart 162: Glance at 2019, 2022 and 2027 Asia-Pacific Zeolites Market Share (%) by

Geographic Region - China, India, Japan, South Korea and Rest of Asia-Pacific

Chart 163: Asia-Pacific Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 164: Glance at 2019, 2022 and 2027 Asia-Pacific Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 165: Asia-Pacific Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 166: Glance at 2019, 2022 and 2027 Asia-Pacific Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 167: Asia-Pacific Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type Y, USY and ZSM-5 in USD Million

Chart 168: Glance at 2019, 2022 and 2027 Asia-Pacific Synthetic Zeolites Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 169: Asia-Pacific Zeolites Market Analysis (2018-2027) by Application –

Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining &

Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million Chart 170: Glance at 2019, 2022 and 2027 Asia-Pacific Synthetic Zeolites Market Share (%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil



Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications China

Chart 171: Chinese Zeolites Market Analysis (2018-2027) in USD Million

Chart 172: Chinese Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 173: Glance at 2019, 2022 and 2027 Chinese Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 174: Chinese Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 175: Glance at 2019, 2022 and 2027 Chinese Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 176: Chinese Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type Y, USY and ZSM-5 in USD Million

Chart 177: Glance at 2019, 2022 and 2027 Chinese Synthetic Zeolites Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 178: Chinese Zeolites Market Analysis (2018-2027) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million

Chart 179: Glance at 2019, 2022 and 2027 Chinese Synthetic Zeolites Market Share (%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications India

Chart 180: Indian Zeolites Market Analysis (2018-2027) in USD Million

Chart 181: Indian Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 182: Glance at 2019, 2022 and 2027 Indian Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 183: Indian Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 184: Glance at 2019, 2022 and 2027 Indian Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 185: Indian Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – c, Type X, Type Y, USY and ZSM-5 in USD Million

Chart 186: Glance at 2019, 2022 and 2027 Indian Synthetic Zeolites Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 187: Indian Zeolites Market Analysis (2018-2027) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million

Chart 188: Glance at 2019, 2022 and 2027 Indian Synthetic Zeolites Market Share (%)



by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications Japan

Chart 189: Japanese Zeolites Market Analysis (2018-2027) in USD Million

Chart 190: Japanese Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 191: Glance at 2019, 2022 and 2027 Japanese Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 192: Japanese Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 193: Glance at 2019, 2022 and 2027 Japanese Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 194: Japanese Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type Y, USY and ZSM-5 in USD Million

Chart 195: Glance at 2019, 2022 and 2027 Japanese Synthetic Zeolites Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 196: Japanese Zeolites Market Analysis (2018-2027) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million

Chart 197: Glance at 2019, 2022 and 2027 Japanese Synthetic Zeolites Market Share (%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications South Korea

Chart 198: South Korean Zeolites Market Analysis (2018-2027) in USD Million

Chart 199: South Korean Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 200: Glance at 2019, 2022 and 2027 South Korean Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 201: South Korean Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 202: Glance at 2019, 2022 and 2027 South Korean Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 203: South Korean Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type Y, USY and ZSM-5 in USD Million

Chart 204: Glance at 2019, 2022 and 2027 South Korean Synthetic Zeolites Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 205: South Korean Zeolites Market Analysis (2018-2027) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million



Chart 206: Glance at 2019, 2022 and 2027 South Korean Synthetic Zeolites Market Share (%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications

Rest of Asia-Pacific

Chart 207: Rest of Asia-Pacific Zeolites Market Analysis (2018-2027) in USD Million

Chart 208: Rest of Asia-Pacific Zeolites Market Analysis (2018-2027) by Product Type –

Natural Zeolites and Synthetic Zeolites in USD Million

Chart 209: Glance at 2019, 2022 and 2027 Rest of Asia-Pacific Zeolites Market Share

(%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 210: Rest of Asia-Pacific Natural Zeolites Market Analysis (2018-2027) by Sub-

Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 211: Glance at 2019, 2022 and 2027 Rest of Asia-Pacific Natural Zeolites Market

Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 212: Rest of Asia-Pacific Synthetic Zeolites Market Analysis (2018-2027) by Sub-

Type – Type A, Type X, Type Y, USY and ZSM-5 in USD Million

Chart 213: Glance at 2019, 2022 and 2027 Rest of Asia-Pacific Synthetic Zeolites

Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 214: Rest of Asia-Pacific Zeolites Market Analysis (2018-2027) by Application –

Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining &

Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million

Chart 215: Glance at 2019, 2022 and 2027 Rest of Asia-Pacific Synthetic Zeolites

Market Share (%) by Application – Agriculture, Animal Feed, Building & Construction,

Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications

#### **SOUTH AMERICA**

Chart 216: South American Zeolites Market Analysis (2018-2027) in USD Million

Chart 217: South American Zeolites Market Analysis (2018-2027) by Geographic

Region - Argentina, Brazil and Rest of South America in USD Million

Chart 218: Glance at 2019, 2022 and 2027 South American Zeolites Market Share (%)

by Geographic Region - Argentina, Brazil and Rest of South America

Chart 219: South American Zeolites Market Analysis (2018-2027) by Product Type –

Natural Zeolites and Synthetic Zeolites in USD Million

Chart 220: Glance at 2019, 2022 and 2027 South American Zeolites Market Share (%)

by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 221: South American Natural Zeolites Market Analysis (2018-2027) by Sub-Type

- Clinoptilolite and Other Natural Zeolites in USD Million

Chart 222: Glance at 2019, 2022 and 2027 South American Natural Zeolites Market

Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites



Chart 223: South American Synthetic Zeolites Market Analysis (2018-2027) by Sub-

Type – Type A, Type X, Type Y, USY and ZSM-5 in USD Million

Chart 224: Glance at 2019, 2022 and 2027 South American Synthetic Zeolites Market

Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 225: South American Zeolites Market Analysis (2018-2027) by Application –

Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining &

Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million

Chart 226: Glance at 2019, 2022 and 2027 South American Synthetic Zeolites Market

Share (%) by Application – Agriculture, Animal Feed, Building & Construction,

Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications

## Argentina

Chart 227: Argentine Zeolites Market Analysis (2018-2027) in USD Million

Chart 228: Argentine Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 229: Glance at 2019, 2022 and 2027 Argentine Zeolites Market Share (%) by

Product Type – Natural Zeolites and Synthetic Zeolites

Chart 230: Argentine Natural Zeolites Market Analysis (2018-2027) by Sub-Type -

Clinoptilolite and Other Natural Zeolites in USD Million

Chart 231: Glance at 2019, 2022 and 2027 Argentine Natural Zeolites Market Share (%)

by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 232: Argentine Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type –

Type A, Type X, Type Y, USY and ZSM-5 in USD Million

Chart 233: Glance at 2019, 2022 and 2027 Argentine Synthetic Zeolites Market Share

(%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 234: Argentine Zeolites Market Analysis (2018-2027) by Application – Agriculture,

Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals,

Water & Wastewater Treatment and Other Applications in USD Million

Chart 235: Glance at 2019, 2022 and 2027 Argentine Synthetic Zeolites Market Share

(%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil

Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications

Brazil

Chart 236: Brazilian Zeolites Market Analysis (2018-2027) in USD Million

Chart 237: Brazilian Zeolites Market Analysis (2018-2027) by Product Type – Natural

Zeolites and Synthetic Zeolites in USD Million

Chart 238: Glance at 2019, 2022 and 2027 Brazilian Zeolites Market Share (%) by

Product Type – Natural Zeolites and Synthetic Zeolites

Chart 239: Brazilian Natural Zeolites Market Analysis (2018-2027) by Sub-Type –

Clinoptilolite and Other Natural Zeolites in USD Million



Chart 240: Glance at 2019, 2022 and 2027 Brazilian Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 241: Brazilian Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type Y, USY and ZSM-5 in USD Million

Chart 242: Glance at 2019, 2022 and 2027 Brazilian Synthetic Zeolites Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 243: Brazilian Zeolites Market Analysis (2018-2027) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million

Chart 244: Glance at 2019, 2022 and 2027 Brazilian Synthetic Zeolites Market Share (%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other Applications Rest of South America

Chart 245: Rest of South American Zeolites Market Analysis (2018-2027) in USD Million Chart 246: Rest of South American Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 247: Glance at 2019, 2022 and 2027 Rest of South American Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites

Chart 248: Rest of South American Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million

Chart 249: Glance at 2019, 2022 and 2027 Rest of South American Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites

Chart 250: Rest of South American Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type Y, USY and ZSM-5 in USD Million

Chart 251: Glance at 2019, 2022 and 2027 Rest of South American Synthetic Zeolites Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5

Chart 252: Rest of South American Zeolites Market Analysis (2018-2027) by Application

Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining &
 Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million
 Chart 253: Glance at 2019, 2022 and 2027 Rest of South American Synthetic Zeolites

Market Share (%) by Application – Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other

Applications

#### MIDDLE EAST & AFRICA

Chart 254: Middle East & Africa Zeolites Market Analysis (2018-2027) in USD Million Chart 255: Middle East & Africa Zeolites Market Analysis (2018-2027) by Product Type – Natural Zeolites and Synthetic Zeolites in USD Million

Chart 256: Glance at 2019, 2022 and 2027 Middle East & Africa Zeolites Market Share (%) by Product Type – Natural Zeolites and Synthetic Zeolites



Chart 257: Middle East & Africa Natural Zeolites Market Analysis (2018-2027) by Sub-Type – Clinoptilolite and Other Natural Zeolites in USD Million
Chart 258: Glance at 2019, 2022 and 2027 Middle East & Africa Natural Zeolites Market Share (%) by Sub-Type – Clinoptilolite and Other Natural Zeolites
Chart 259: Middle East & Africa Synthetic Zeolites Market Analysis (2018-2027) by Sub-Type – Type A, Type X, Type Y, USY and ZSM-5 in USD Million
Chart 260: Glance at 2019, 2022 and 2027 Middle East & Africa Synthetic Zeolites
Market Share (%) by Product Type – Type A, Type X, Type Y, USY and ZSM-5
Chart 261: Middle East & Africa Zeolites Market Analysis (2018-2027) by Application –
Agriculture, Animal Feed, Building & Construction, Detergents, Oil Refining &
Petrochemicals, Water & Wastewater Treatment and Other Applications in USD Million
Chart 262: Glance at 2019, 2022 and 2027 Middle East & Africa Synthetic Zeolites
Market Share (%) by Application – Agriculture, Animal Feed, Building & Construction,
Detergents, Oil Refining & Petrochemicals, Water & Wastewater Treatment and Other
Applications



## **Tables**

#### **TABLES:**

- Table 1: Diameter of the Pore in 10-10 m and Pore Volumes (in %) of Low Silica Zeolite
- Table 2: Structural Properties of Selected Important Natural Zeolites
- Table 3: Chemical Composition and CECs of Natural Zeolites from Different Regions
- Table 4: Experimental Conditions for Synthesizing Clinoptilolite
- Table 5: Properties of Chabazite
- Table 6: Properties of Stilbite
- Table 7: Properties of Analcime
- Table 8: Properties of Laumontite
- Table 9: Chemical Sources and their Corresponding Role in the Synthesis of Zeolites
- Table 10: Selected Leading Zeolites Used in Commercial Applications
- Table 11: Role Played by Zeolites in Improving the Performance Promoting Properties of Animals
- Table 12: In Vivo Studies Related to the Effect of Dietary Use of Zeolites During Aflatoxicoses
- Table 13: Detergent Builders Over the Years
- Table 14: Some Examples of CO2 Conversion over Zeolite Catalysts



## **Figures**

#### FIGURES:

- Figure 1: Depiction of Zeolite's Chemical Structure
- Figure 2: Schematic of the Building Units of Zeolite's Structure
- Figure 3: Some Cage Building Units in Zeolites
- Figure 4: Structural Depiction of Pores in Select Zeolites: (a) 8-Ring Zeolite A (b)
- 10-Ring Zeolite ZSM-5 (c) 12-Ring Zeolite Y
- Figure 5: Br?nsted Acid Sites in Zeolite Materials
- Figure 6: A Schematic Depiction of Clinoptilolite Synthesis
- Figure 7: Composite Building Units (CBUs) and Framework Structure of Zeolite A (LTA)
- Figure 8: Composite Building Units (CBUs) and Framework Structure of Zeolites X and
- Y or Faujasite (FAU)
- Figure 9: Framework Structure of Zeolite ZSM-5 (MFI)



## I would like to order

Product name: Global Zeolites Market – Products and Applications

Product link: <a href="https://marketpublishers.com/r/G5480A3E7539EN.html">https://marketpublishers.com/r/G5480A3E7539EN.html</a>

Price: US\$ 4,500.00 (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 <a href="https://marketpublishers.com/r/G5480A3E7539EN.html">https://marketpublishers.com/r/G5480A3E7539EN.html</a>

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					
	Custumer signature					

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

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