

PC-based Concrete Superplasticizer Market By Form (Liquid, Powder), By Application (Ready Mix Concrete, Precast Concrete, High-Performance Concrete, Others): Global Opportunity Analysis and Industry Forecast, 2023-2032

Market Report | 2024-03-01 | 315 pages | Allied Market Research

AVAILABLE LICENSES:

- Cloud Access License \$3213.00
- Business User License \$5157.00
- Enterprise License \$8640.00

Report description:

Polycarboxylate (PC)-based concrete superplasticizer market attained \$13.0 billion in 2022 and is projected to reach \$30.6?billion by 2032, growing at a CAGR of 9.1% from 2023 to 2032.

Polycarboxylate (PC)-based concrete superplasticizers are a type of chemical admixture used in the construction industry to enhance the performance of concrete mixes. These superplasticizers are essential in modern concrete technology, allowing to produce high-performance concrete with improved workability, strength, durability, and aesthetic appeal. The primary function of PC-based superplasticizers is to reduce the water-to-cement ratio in concrete mixes without compromising their flowability, thereby increasing the strength and durability of the resulting concrete structures.

Surge in Demand for Precast Concrete in the Construction Industry

Precast elements are engineered to accommodate a wide range of architectural and structural requirements, making them suitable for a diverse array of construction projects, including residential, commercial, industrial, and infrastructure developments. From intricate architectural facades to large-scale structural components such as beams, columns, and bridge segments, precast concrete offers unmatched flexibility and adaptability in design. Precast concrete offers numerous advantages in terms of efficiency, quality control, and speed of construction, making it a preferred choice for many projects. PC-based superplasticizers are used to improve the workability and performance of concrete mixes, allowing for easier placement and achieving higher strengths.

Precast concrete involves the manufacturing of concrete elements such as beams, columns, panels, and slabs in a controlled environment away from the construction site. These elements are then transported and assembled at the site, reducing construction time, labor costs, and environmental impact. The demand for precast concrete stems from its ability to offer consistency in quality, faster construction cycles, and improved structural integrity compared to traditional cast-in-place concrete methods. ?In February 2023, the Arkansas Space Grant Consortium (ASGC) achieved a significant milestone with the completion of

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Grand Creek Harbour, located at Dubai Creek Harbour. This expansive development spans 2 million square feet and consists of two elegant towers. Among its offerings are a luxurious 5-star hotel boasting 220 keys and 790 serviced apartments. Notably, the development showcases a striking glass facade and prioritizes sustainability through the integration of solar panels, energy-efficient fixtures, eco-friendly materials, and water-conscious landscaping practices. Precast concrete superplasticizers are commonly used in commercial construction projects to improve the workability and performance of concrete mixes. Thus, the surge in demand for precast concrete in the construction industry is expected to drive the growth of the PC-based concrete superplasticizer market.

High Cost

The higher cost of PC-based superplasticizers compared to traditional alternatives poses a significant barrier to their widespread adoption in construction projects, especially in regions with price-sensitive markets. Traditional superplasticizers, such as sulfonated melamine formaldehyde (SMF) or sulfonated naphthalene formaldehyde (SNF), are often more economically feasible due to their lower production costs. For projects with tight budgets or where cost-effectiveness is a primary concern, the added expense of PC-based superplasticizers may outweigh their potential benefits in terms of improved concrete workability and strength. Construction companies may opt for cheaper alternatives to minimize expenses, even if it means sacrificing some performance advantages.

In price-sensitive markets, the higher cost of PC-based superplasticizers can deter contractors and developers from incorporating them into their projects, leading to limited market penetration. Manufacturers of PC-based superplasticizers must address this challenge by optimizing production processes, exploring cost-saving measures, and demonstrating the long-term benefits of their products in terms of concrete performance, durability, and overall project quality. Additionally, targeted pricing strategies and incentives may be necessary to encourage wider adoption of PC-based superplasticizers in cost-conscious construction markets.

Rise in Demand for Architectural Concrete

Polycarboxylate-based superplasticizers provide excellent workability to concrete mixes, allowing for precise placement and finishing of architectural elements. This enables concrete contractors and artisans to achieve intricate designs and details with ease. The superior dispersing and fluidizing properties of polycarboxylate-based superplasticizers result in concrete mixes with smoother and more consistent surface finishes. This is crucial for achieving the desired aesthetic appeal in architectural concrete, where surface imperfections detract from the overall appearance. Polycarboxylate-based superplasticizers help prevent segregation and bleeding of cement in concrete mixes, ensuring uniform distribution of aggregates and cementitious materials. This is particularly important for exposed aggregate surfaces and decorative elements, where uniformity is essential for achieving a visually pleasing appearance.

Polycarboxylate-based superplasticizers enable better dispersion of pigments and colorants throughout the concrete mix, resulting in enhanced color uniformity and consistency. This is critical for architectural concrete applications where color matching and consistency are paramount for achieving the desired aesthetic effect. The versatility of polycarboxylate-based superplasticizers allows architects and designers greater freedom in exploring innovative and complex concrete designs. Thus, the rise in demand for architectural concrete presents lucrative growth opportunities for the market.

The PC-based concrete superplasticizer market is segmented on the basis of form, application, and region. By form, the market is bifurcated into powder and liquid. On the basis of application, the market is categorized into ready-mix concrete, precast concrete, high-performance concrete, and others. Region-wise, the market is studied across North America, Europe, Asia-Pacific, and LAMEA.

The players operating in the global PC-based concrete superplasticizer market are Sika AG, Arkema, MAPEI S.p.A., KZJ New Materials Group, JIAHUA CHEMICALS INC., TSC, Shandong Zovae High-tech Material Co., Ltd., Metro Chemicals, MUHU (China) Construction Materials Co., Ltd., and Sakshi Chem Sciences Private Limited.

Key Benefits For Stakeholders

- This report provides a quantitative analysis of the market segments, current trends, estimations, and dynamics of the pc-based concrete superplasticizer market analysis from 2022 to 2032 to identify the prevailing pc-based concrete superplasticizer market opportunities.

- The market research is offered along with information related to key drivers, restraints, and opportunities.

- Porter's five forces analysis highlights the potency of buyers and suppliers to enable stakeholders make profit-oriented business

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

decisions and strengthen their supplier-buyer network.

-In-depth analysis of the pc-based concrete superplasticizer market segmentation assists to determine the prevailing market opportunities.

-Major countries in each region are mapped according to their revenue contribution to the global market.

-Market player positioning facilitates benchmarking and provides a clear understanding of the present position of the market players.

-The report includes the analysis of the regional as well as global pc-based concrete superplasticizer market trends, key players, market segments, application areas, and market growth strategies.

Additional benefits you will get with this purchase are:

- Quarterly Update and* (only available with a corporate license, on listed price)
- 5 additional Company Profile of client Choice pre- or Post-purchase, as a free update.
- Free Upcoming Version on the Purchase of Five and Enterprise User License.
- 16 analyst hours of support* (post-purchase, if you find additional data requirements upon review of the report, you may receive support amounting to 16 analyst hours to solve questions, and post-sale queries)
- 15% Free Customization* (in case the scope or segment of the report does not match your requirements, 15% is equivalent to 3 working days of free work, applicable once)
- Free data Pack on the Five and Enterprise User License. (Excel version of the report)
- Free Updated report if the report is 6-12 months old or older.
- 24-hour priority response*
- Free Industry updates and white papers.

Possible Customization with this report (with additional cost and timeline, please talk to the sales executive to know more)

- Market share analysis of players by products/segments

- Regulatory Guidelines

- Volume Market Size and Forecast

Key Market Segments

By Form

- Liquid

- Powder

By Application

- Ready Mix Concrete

- Precast Concrete

- High-Performance Concrete

- Others

By Region

- North America

? U.S.

? Canada

? Mexico

- Europe

? Germany

? France

? Italy

? UK

? Spain

? Rest of Europe

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- Asia-Pacific
 - ? China
 - ? India
 - ? Japan
 - ? South Korea
 - ? Australia
 - ? Rest of Asia-Pacific
- LAMEA
 - ? Brazil
 - ? Saudi Arabia
 - ? South Africa
 - ? Rest of LAMEA
- Key Market Players
 - ? Sika AG
 - ? TSC
 - ? Metro Chemicals
 - ? Sakshi Chem Sciences Private Limited
 - ? JIAHUA CHEMICALS INC.
 - ? KZJ New Materials Group
 - ? MAPEI S.p.A.
 - ? MUHU (China) Construction Materials Co., Ltd.
 - ? Arkema
 - ? Shandong Zovae High-tech Material Co., Ltd.

Table of Contents:

CHAPTER 1: INTRODUCTION

- 1.1. Report description
- 1.2. Key market segments
- 1.3. Key benefits to the stakeholders
- 1.4. Research methodology
 - 1.4.1. Primary research
 - 1.4.2. Secondary research
 - 1.4.3. Analyst tools and models

CHAPTER 2: EXECUTIVE SUMMARY

- 2.1. CXO perspective

CHAPTER 3: MARKET OVERVIEW

- 3.1. Market definition and scope
- 3.2. Key findings
 - 3.2.1. Top impacting factors
 - 3.2.2. Top investment pockets
- 3.3. Porter's five forces analysis
 - 3.3.1. Moderate bargaining power of suppliers
 - 3.3.2. Moderate threat of new entrants
 - 3.3.3. High threat of substitutes
 - 3.3.4. Moderate intensity of rivalry
 - 3.3.5. Moderate bargaining power of buyers
- 3.4. Market dynamics

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 3.4.1. Drivers
 - 3.4.1.1. Increase in demand for modern construction projects
 - 3.4.1.2. Surge in demand for precast concrete in the construction industry
- 3.4.2. Restraints
 - 3.4.2.1. Availability of alternatives
- 3.4.3. Opportunities
 - 3.4.3.1. Increase in awareness for environmental sustainability and eco-friendly construction materials
 - 3.4.3.2. Rise in demand for architectural concrete
- 3.5. Regulatory Guidelines
- 3.6. Raw Material Outlook

CHAPTER 4: PC-BASED CONCRETE SUPERPLASTICIZER MARKET, BY FORM

- 4.1. Overview
 - 4.1.1. Market size and forecast
- 4.2. Liquid
 - 4.2.1. Key market trends, growth factors and opportunities
 - 4.2.2. Market size and forecast, by region
 - 4.2.3. Market share analysis by country
- 4.3. Powder
 - 4.3.1. Key market trends, growth factors and opportunities
 - 4.3.2. Market size and forecast, by region
 - 4.3.3. Market share analysis by country

CHAPTER 5: PC-BASED CONCRETE SUPERPLASTICIZER MARKET, BY APPLICATION

- 5.1. Overview
 - 5.1.1. Market size and forecast
- 5.2. Ready Mix Concrete
 - 5.2.1. Key market trends, growth factors and opportunities
 - 5.2.2. Market size and forecast, by region
 - 5.2.3. Market share analysis by country
- 5.3. Precast Concrete
 - 5.3.1. Key market trends, growth factors and opportunities
 - 5.3.2. Market size and forecast, by region
 - 5.3.3. Market share analysis by country
- 5.4. High-Performance Concrete
 - 5.4.1. Key market trends, growth factors and opportunities
 - 5.4.2. Market size and forecast, by region
 - 5.4.3. Market share analysis by country
- 5.5. Others
 - 5.5.1. Key market trends, growth factors and opportunities
 - 5.5.2. Market size and forecast, by region
 - 5.5.3. Market share analysis by country

CHAPTER 6: PC-BASED CONCRETE SUPERPLASTICIZER MARKET, BY REGION

- 6.1. Overview
 - 6.1.1. Market size and forecast By Region
- 6.2. North America
 - 6.2.1. Key market trends, growth factors and opportunities
 - 6.2.2. Market size and forecast, by Form
 - 6.2.3. Market size and forecast, by Application

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 6.2.4. Market size and forecast, by country
 - 6.2.4.1. U.S.
 - 6.2.4.1.1. Market size and forecast, by Form
 - 6.2.4.1.2. Market size and forecast, by Application
 - 6.2.4.2. Canada
 - 6.2.4.2.1. Market size and forecast, by Form
 - 6.2.4.2.2. Market size and forecast, by Application
 - 6.2.4.3. Mexico
 - 6.2.4.3.1. Market size and forecast, by Form
 - 6.2.4.3.2. Market size and forecast, by Application
- 6.3. Europe
 - 6.3.1. Key market trends, growth factors and opportunities
 - 6.3.2. Market size and forecast, by Form
 - 6.3.3. Market size and forecast, by Application
 - 6.3.4. Market size and forecast, by country
 - 6.3.4.1. Germany
 - 6.3.4.1.1. Market size and forecast, by Form
 - 6.3.4.1.2. Market size and forecast, by Application
 - 6.3.4.2. France
 - 6.3.4.2.1. Market size and forecast, by Form
 - 6.3.4.2.2. Market size and forecast, by Application
 - 6.3.4.3. Italy
 - 6.3.4.3.1. Market size and forecast, by Form
 - 6.3.4.3.2. Market size and forecast, by Application
 - 6.3.4.4. UK
 - 6.3.4.4.1. Market size and forecast, by Form
 - 6.3.4.4.2. Market size and forecast, by Application
 - 6.3.4.5. Spain
 - 6.3.4.5.1. Market size and forecast, by Form
 - 6.3.4.5.2. Market size and forecast, by Application
 - 6.3.4.6. Rest of Europe
 - 6.3.4.6.1. Market size and forecast, by Form
 - 6.3.4.6.2. Market size and forecast, by Application
- 6.4. Asia-Pacific
 - 6.4.1. Key market trends, growth factors and opportunities
 - 6.4.2. Market size and forecast, by Form
 - 6.4.3. Market size and forecast, by Application
 - 6.4.4. Market size and forecast, by country
 - 6.4.4.1. China
 - 6.4.4.1.1. Market size and forecast, by Form
 - 6.4.4.1.2. Market size and forecast, by Application
 - 6.4.4.2. India
 - 6.4.4.2.1. Market size and forecast, by Form
 - 6.4.4.2.2. Market size and forecast, by Application
 - 6.4.4.3. Japan
 - 6.4.4.3.1. Market size and forecast, by Form
 - 6.4.4.3.2. Market size and forecast, by Application

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 6.4.4.4. South Korea
 - 6.4.4.4.1. Market size and forecast, by Form
 - 6.4.4.4.2. Market size and forecast, by Application
- 6.4.4.5. Australia
 - 6.4.4.5.1. Market size and forecast, by Form
 - 6.4.4.5.2. Market size and forecast, by Application
- 6.4.4.6. Rest of Asia-Pacific
 - 6.4.4.6.1. Market size and forecast, by Form
 - 6.4.4.6.2. Market size and forecast, by Application
- 6.5. LAMEA
 - 6.5.1. Key market trends, growth factors and opportunities
 - 6.5.2. Market size and forecast, by Form
 - 6.5.3. Market size and forecast, by Application
 - 6.5.4. Market size and forecast, by country
 - 6.5.4.1. Brazil
 - 6.5.4.1.1. Market size and forecast, by Form
 - 6.5.4.1.2. Market size and forecast, by Application
 - 6.5.4.2. Saudi Arabia
 - 6.5.4.2.1. Market size and forecast, by Form
 - 6.5.4.2.2. Market size and forecast, by Application
 - 6.5.4.3. South Africa
 - 6.5.4.3.1. Market size and forecast, by Form
 - 6.5.4.3.2. Market size and forecast, by Application
 - 6.5.4.4. Rest of LAMEA
 - 6.5.4.4.1. Market size and forecast, by Form
 - 6.5.4.4.2. Market size and forecast, by Application

CHAPTER 7: COMPETITIVE LANDSCAPE

- 7.1. Introduction
- 7.2. Top winning strategies
- 7.3. Product mapping of top 10 player
- 7.4. Competitive dashboard
- 7.5. Competitive heatmap
- 7.6. Top player positioning, 2022

CHAPTER 8: COMPANY PROFILES

- 8.1. Sika AG
 - 8.1.1. Company overview
 - 8.1.2. Key executives
 - 8.1.3. Company snapshot
 - 8.1.4. Operating business segments
 - 8.1.5. Product portfolio
 - 8.1.6. Business performance
 - 8.1.7. Key strategic moves and developments
- 8.2. Arkema
 - 8.2.1. Company overview
 - 8.2.2. Key executives
 - 8.2.3. Company snapshot
 - 8.2.4. Operating business segments

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 8.2.5. Product portfolio
- 8.2.6. Business performance
- 8.3. MAPEI S.p.A.
 - 8.3.1. Company overview
 - 8.3.2. Key executives
 - 8.3.3. Company snapshot
 - 8.3.4. Operating business segments
 - 8.3.5. Product portfolio
 - 8.3.6. Business performance
- 8.4. KZJ New Materials Group
 - 8.4.1. Company overview
 - 8.4.2. Key executives
 - 8.4.3. Company snapshot
 - 8.4.4. Operating business segments
 - 8.4.5. Product portfolio
- 8.5. JIAHUA CHEMICALS INC.
 - 8.5.1. Company overview
 - 8.5.2. Key executives
 - 8.5.3. Company snapshot
 - 8.5.4. Operating business segments
 - 8.5.5. Product portfolio
- 8.6. TSC
 - 8.6.1. Company overview
 - 8.6.2. Key executives
 - 8.6.3. Company snapshot
 - 8.6.4. Operating business segments
 - 8.6.5. Product portfolio
- 8.7. Shandong Zovae High-tech Material Co., Ltd.
 - 8.7.1. Company overview
 - 8.7.2. Key executives
 - 8.7.3. Company snapshot
 - 8.7.4. Operating business segments
 - 8.7.5. Product portfolio
 - 8.7.6. Key strategic moves and developments
- 8.8. Metro Chemicals
 - 8.8.1. Company overview
 - 8.8.2. Key executives
 - 8.8.3. Company snapshot
 - 8.8.4. Operating business segments
 - 8.8.5. Product portfolio
- 8.9. MUHU (China) Construction Materials Co., Ltd.
 - 8.9.1. Company overview
 - 8.9.2. Key executives
 - 8.9.3. Company snapshot
 - 8.9.4. Operating business segments
 - 8.9.5. Product portfolio
- 8.10. Sakshi Chem Sciences Private Limited

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 8.10.1. Company overview
- 8.10.2. Key executives
- 8.10.3. Company snapshot
- 8.10.4. Operating business segments
- 8.10.5. Product portfolio

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

PC-based Concrete Superplasticizer Market By Form (Liquid, Powder), By Application (Ready Mix Concrete, Precast Concrete, High-Performance Concrete, Others): Global Opportunity Analysis and Industry Forecast, 2023-2032

Market Report | 2024-03-01 | 315 pages | Allied Market Research

To place an Order with Scotts International:

- ☐ - Print this form
- ☐ - Complete the relevant blank fields and sign
- ☐ - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Cloud Access License	\$3213.00
	Business User License	\$5157.00
	Enterprise License	\$8640.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2025-05-07"/>

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Signature

A large, empty rectangular box with a thin black border, intended for a signature.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com