







# Silicate Gostar Esfahan



Regarding the quality and production volume of the company's various products and its cooperation with the leading manufacturers in domestic and foreign industries, some of the proud cooperation achievements of Silicate Gostar Esfahan Company can be mentioned as follows:



## A brief history

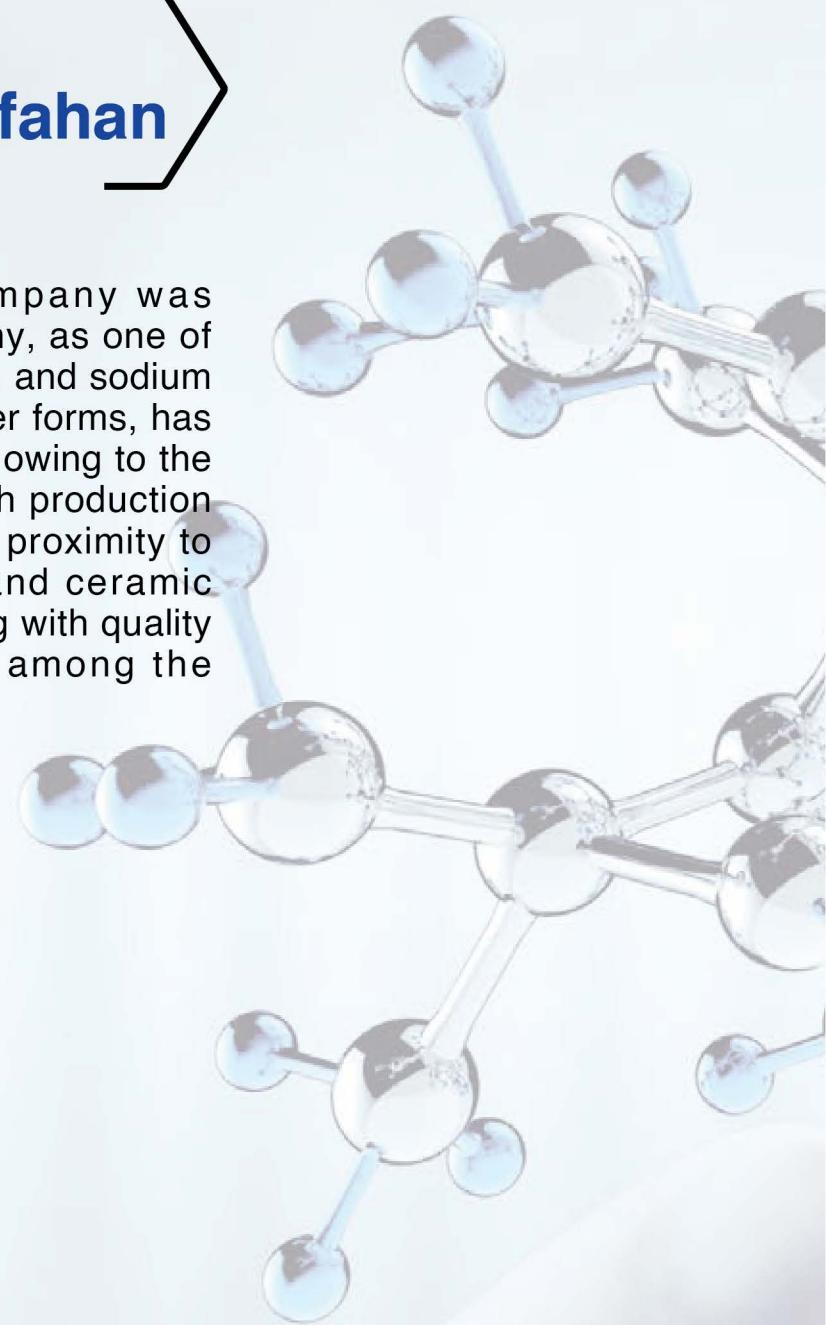
Silicate Gostar Esfahan Company operates as one of the oldest and most well-known producers of the silicate industry in Iran with 30 years of experience in the field of producing types of potassium and sodium silicates in solid, liquid, and powder forms.

Cooperation with large companies in different fields such as detergent, steel, casting, tile and ceramic, carton manufacturing, and drilling industries is one of the honors of this production complex. Considering the policies and goals set in its research and development department, maintaining quality and expanding the diversity and application of manufactured products are among the goals of the complex.



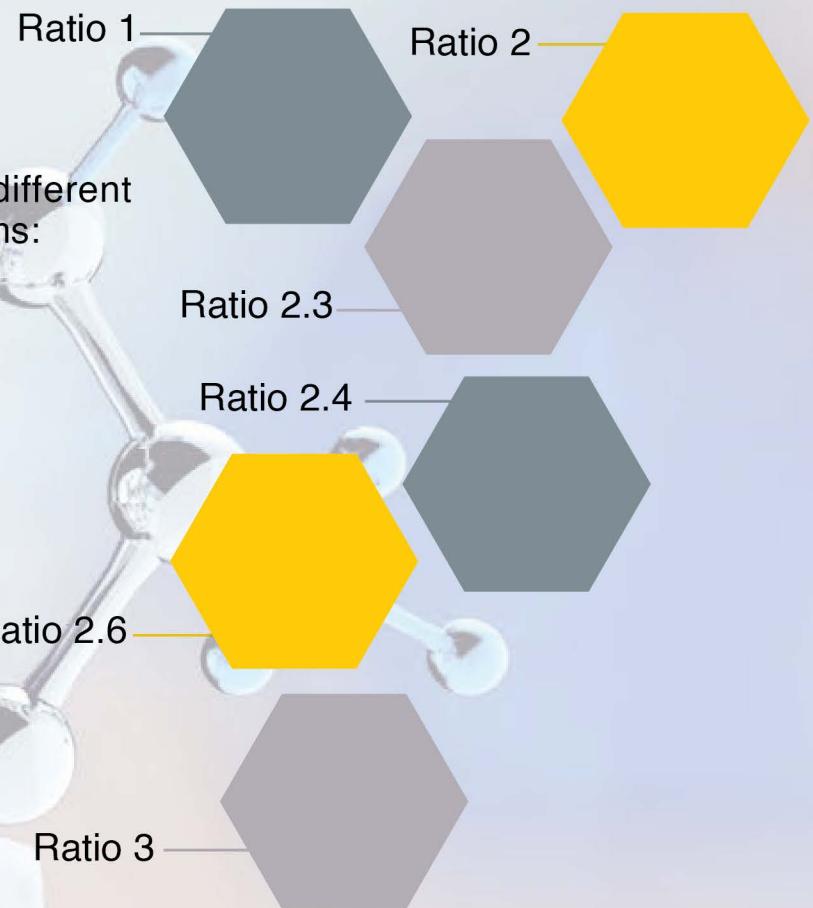
# Introduction to Silicate Gostar Esfahan

Silicate Gostar Esfahan Company was established in 1995. The company, as one of the oldest producers of potassium and sodium silicates in solid, liquid and powder forms, has gained its customers' satisfaction owing to the quality of its products and its high production capacity. Geographical location, proximity to major steel, casting, and tile and ceramic industries, and accessibility, along with quality and production capacity, are among the advantages of the complex.



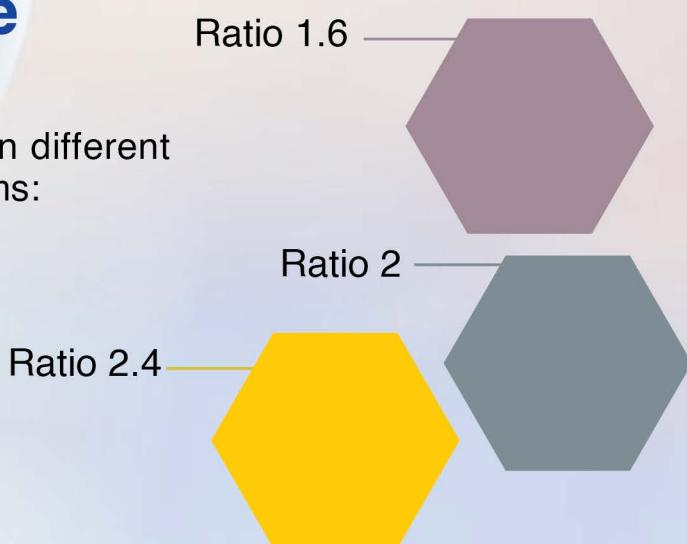
## Sodium silicate

Sodium silicate is produced in different ratios in both liquid and solid forms:



## Potassium silicate

Potassium silicate is produced in different ratios in both liquid and solid forms:



## Applications of types of sodium and potassium silicates in industry:



### Applications of types of silicate

#### Sodium metasilicate

Sodium metasilicate ratio 1 has high cleaning power on hard surfaces owing to the equal ratio of sodium and silicate, and it has multi-purpose properties in cleaning and removing grease and dust in hard water.

- ◆ Lubricant in the tile and ceramic industry
- ◆ Degreaser in the plating industry
- ◆ Production of other detergents

This product can be produced in two types: Pentahydrate and nonahydrate

#### Detergent industry

Sodium silicate is used in the production of detergent powders. In addition to its detergent and stain removal properties, its other applications include production of bar soaps, surface cleaning sprays, and various liquid detergents.



## Cardboard and paperboard tube industry

One of the most common applications of silicate is in the production of cardboard and paperboard sheets. Each thin layer of paper, usually recycled paper, is impregnated with sodium silicate, so that these thin layers are glued together layer by layer to produce cardboard sheets or paperboard layers.



## Carton adhesive industry (Edgebanding adhesive and laminating)

Silicate is used as an adhesive enhancer for paper pulp and for gluing cardboard boxes and adhesives in packaging lines of various industries, especially the detergent industry.





## Casting and cast iron industry

In the casting process, to make silica bodies, sodium silicate is used as an adhesive to hold silica sand particles in place for mold making.



## Tile and ceramic industry

In the tile and ceramic industry, sodium silicate is one of the oldest lubricants, which initially a ball mill was used to level the soil. Given the extensive changes and needs of the industry over the past years, the complex has also taken steps to diversify and produce other lubricants required for tiles and ceramics.

## Paper and cardboard industry

In the paper and cardboard industry, sodium silicate is used in the pulp preparation stage as an agent to increase the adhesive properties of the pulp texture. Preparation of inks is another use of the material.



## Oil and gas well drilling industry

Sodium silicate has various applications in drilling, the most important of which is its application in Iran as a cement aid in drilling waste management in a process called fixation.



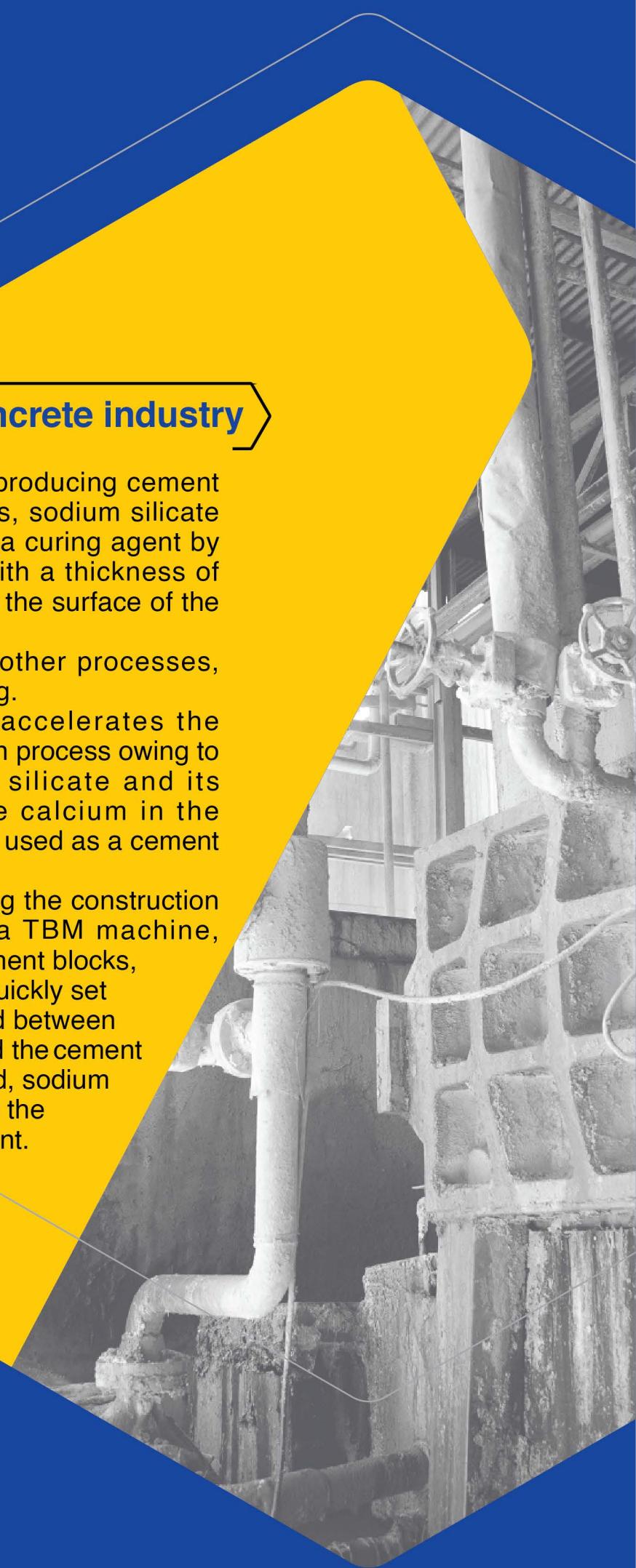
## Concrete industry

In the process of producing cement and concrete parts, sodium silicate can be utilized as a curing agent by forming a glass with a thickness of less than 1 mm on the surface of the part.

It is also used in other processes, including cementing.

Sodium silicate accelerates the concrete production process owing to the presence of silicate and its reaction with the calcium in the cement and is also used as a cement accelerator.

For instance, during the construction of a tunnel with a TBM machine, when installing cement blocks, it is necessary to quickly set the cement injected between the tunnel wall and the cement block. In this regard, sodium silicate accelerates the setting of the cement.





## Steel industry

In the production process of sponge iron, pure powders from the output of the reduction process are used, along with a mixture of lime and sodium silicate, under pressure and in the form of briquettes that can be utilized in the electric arc melting process.

# Standards

Silicate Gostar Esfahan Company has taken steps to protect the interests of stakeholders by complying with legal requirements and has prioritized its customers' satisfaction. As the customer-oriented approach and compliance with production standards in products and establishing safety precautions are crucial for the company, it has obtained ISO 9001 (Quality Management), ISO 14001 (Organizational Environmental Management), and ISO 45001 (Occupational Health and Safety Management) certificates.

The implementation of the ISO standards is aimed at these goals:

1-Standardization (Ensuring product stability and safety)

2-Meeting customer needs

3-Enhancing the quality of processes and products

4-Improving efficiency reducing waste, and saving costs

5-Facilitating cooperation in trade

6-Gaining international credibility





## Safety and time

To deliver orders as quickly as possible, Silicate Gostar Esfahan Company attempts to create quality security for transporting consignments by designing and manufacturing various types of packaging according to the volume and type of products, since the security of cargo transportation requires quality in packaging and the method of transporting goods. By considering standard transportation methods, the best savings in delivery time can be achieved, and customers anywhere in the world can be fully satisfied with the transportation, delivery time and security of goods.



## Future goals

Considering its facilities, rules, and up-to-date standards of the world of industry and commerce, Silicate Gostar Esfahan Company, has set long-term goals for itself in various organizational fields.

Among the goals, the first step is to mention strategies related to human resources within the organization.

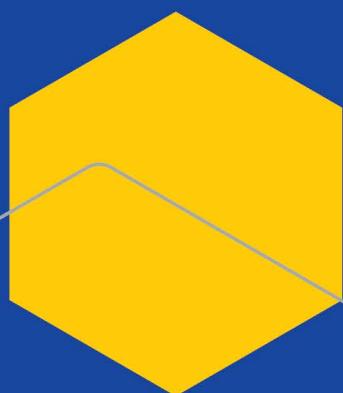
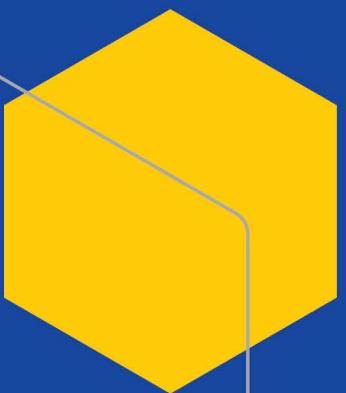
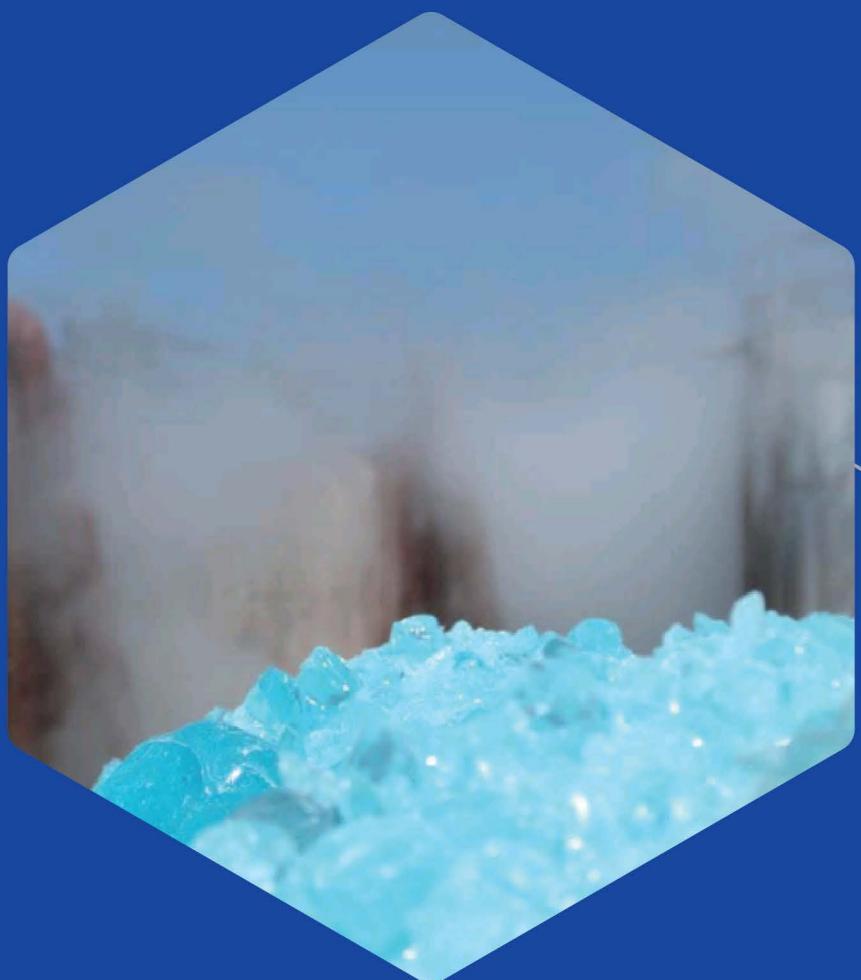
In this regard, the company, by setting a goal of establishing branches and transferring trained personnel with two approaches, namely greater access to customers and intra-organizational transfer of successful employees, has been able to create an incentive for their future growth, leading to greater employee performance and output.

Considering the daily increase in industrial production on Earth, one of the deepest concerns of today's manufacturers is the need to preserve environmental health for future generations and define a scenario for recycling industrial waste.

The company has also focused one of its future goals on using industrial waste from the factory, so that it can produce useful products in the field of building materials by using surplus waste.

The goal will be a small step toward preserving the health of the environment for future generations.











Silicate Gostar Esfahan

 Factory: No. 46, 5th Avenue, Jey Industrial Town, Esfahan, Iran

 Tel: +983135720602  Management: +989020212756

---

 Head Office: Unit 9, No. 42, 7th Avenue, Next to Jalal

Al-e-Ahmad Highway, Northern Karegar Street, Tehran, Iran

 Tel: +982188027357  Commercial management: +989020212757

---

 [info@silicategostar.com](mailto:info@silicategostar.com)  [www.silicategostar.com](http://www.silicategostar.com)