PHA INDUSTRIES PRIVATE LIMITED

India's Premier Green Sodium Silicate Manufacturer

Sustainable Green Chemicals for the Future

We're a leading manufacturer of green chemicals, committed to delivering sustainable solutions for a better world. Our flagship product, sodium silicate, is made with renewable resources and minimal environmental impact.

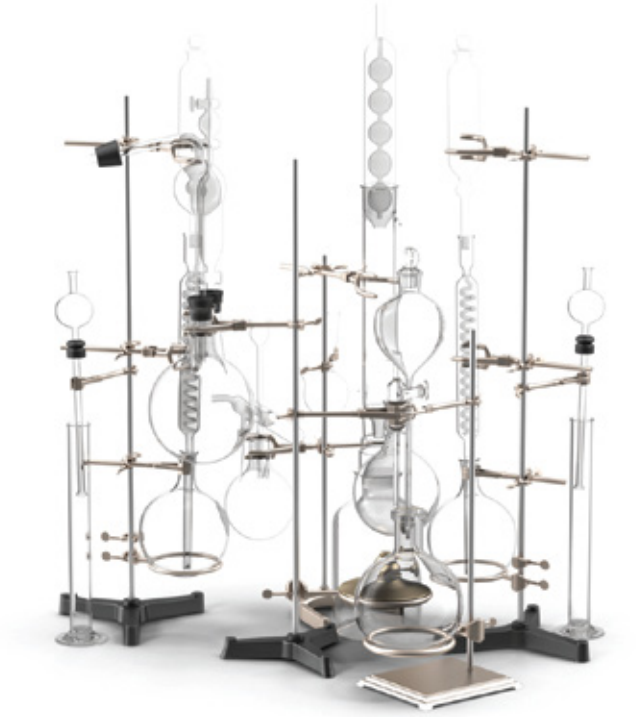
IRENA International Renewable Energy Agency

GREEN CLIMATE FUND

SUSTAINABLE DEVELOPMENT GOALS

2023-2024

About PHA INDUSTRIES



Welcome to the forefront of sustainable chemistry. We are a leading manufacturer of green chemicals, committed to delivering innovative, and eco-friendly solutions for a better world.

Our flagship product is sodium silicate - a versatile and powerful chemical with a wide range of applications. But what sets our sodium renewable resources and minimize our environmental impact, ensuring silicate apart is its sustainable production process. We use only that our customers can feel good about the products they use.

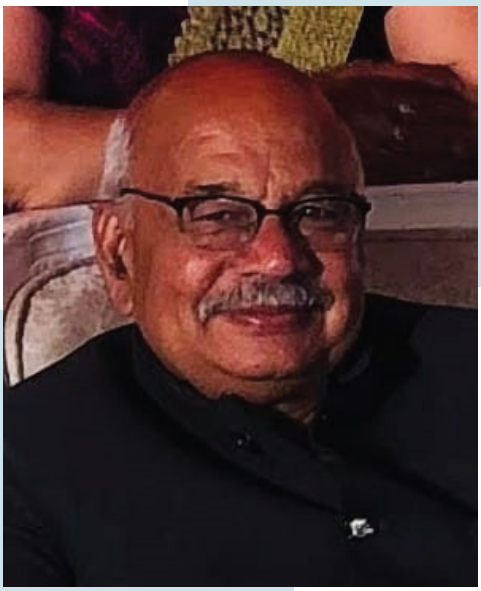
At our state-of-the-art manufacturing facility, we combine cutting-edge technology with expert knowledge to create customized solutions that together, we can make a real difference in building a more sustainable meet the unique needs of our clients. We believe that by working future.

Join us in our mission to create a better, greener world with our range of high-quality, green chemicals, including sodium silicate.

About DIRECTORS

About Padam Nahta:

Padam Nahta is a highly accomplished director of our company, PHA Industries. With his extensive knowledge and experience, he has played a key role in shaping and leading our organization to success. At 67 years old, Mr. Nahta brings a wealth of industry expertise and a deep understanding of the green chemical sector.



About Ayush Nahta:

Ayush Nahta is a talented and dynamic individual with a passion for event planning and a desire for new opportunities. As a wedding planner, he brings creativity, meticulous attention to detail, and a commitment to delivering unforgettable experiences for his clients.

As Ayush Nahta embarks on this new chapter, he is driven by his passion for environmental sustainability and a commitment to creating a greener future. With his unique blend of event planning expertise, Mumbai education, and determination, Ayush is poised to embrace new opportunities in the green chemical industry and make a meaningful impact in this exciting field.

What is SODIUM SILICATE

Green sodium silicate is produced using sustainable, eco-friendly methods & it helps reduce the carbon footprint. It also offers excellent performance properties, such as high stability and excellent adhesion, making it a versatile and effective solution for a wide range of applications.

Wide Variety Of Use Cases

- Detergent and Cleaning Industries
- Packaging Industry (Carton adhesive, laminate and lip adhesive)
- Foundry and Metal Casting Industries
- Ceramic Tiles Industry

Uses of SODIUM SILICATE

Adhesive:
The largest application of sodium silicate solutions is cement for producing cardboard. When used as apaper cement, the tendency is for the sodium silicate joint eventually to crack within a few years, at which point is not longer holds the paper surfaces cemented together.

Drilling Fluids:
Sodium silicate is frequently used in drilling fluids to stabilize borehole wells and to avoid the collapse of bore walls. It is particularly useful when drill holes pass through argillaceous formations containing swelling clay minerals such as steatite or montmorillonite.

Concrete & General Masonry Treatment:
Concrete treated with a sodium silicate solution helps to significantly reduce porosity in most masonry products such as concrete, stucco, plasters. It is generally advised to apply this treatment only after the initial cure has taken place. These coatings are known as silicate mineral paint.

Soap, Bars, Detergents:
It is used in detergent auxiliaries like complex sodium di silicate and modified sodium di silicate. The detergent ranules gain their ruggedness from a coating of silicates.

Water Treatment :
Water glass is used as coagulant/flocculant agent in waste water treatment plants. Water glass binds to colloidal molecules, creating larger aggregates that sink to the bottom of the water column. The microscopic negatively charged particles suspendedin water interact with sodium silicate. Their electrical double layer collapses due to the increase of ionic strength caused by the addition of sodium silicate and they subsequently aggregate. This process is called coagulation/flocculation.

Green Chemistry for a Better Future

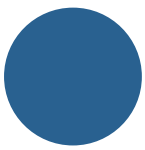
Why Choose Us?

- **Environmental Awareness:**
  As consumers have become more aware of environmental issues, they are more likely to choose products and services that are eco-friendly.

- **Customization:**
  Our green sodium silicate can be customized according to customer requirements, focused on meeting the specific needs of individual customers.

- **Efficiency:**
  Our company has an efficient and fast supply chain making us a reliable and timely supply of green sodium silicate.

By embracing sustainable chemistry, we can innovate and develop safer, cleaner, and more efficient products that meet the needs of our customers while also protecting the planet for future generations.



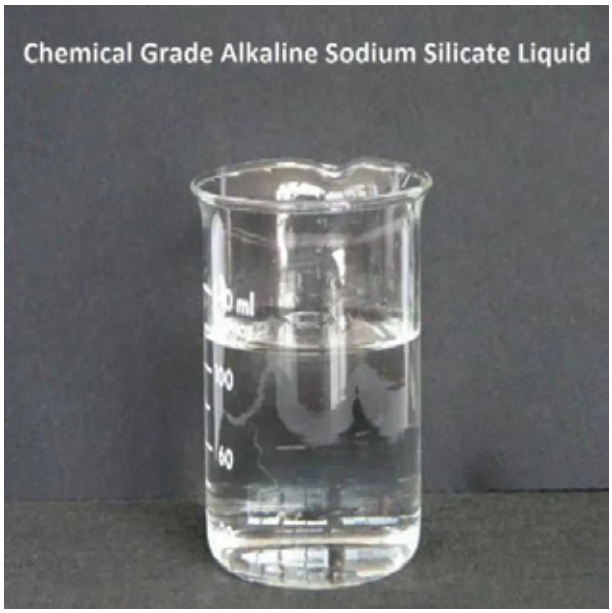
Ayush Nahata
CEO & Managing Director, PHA Chemicals

PHA's Product Line

Alkaline Sodium Silicate: One of the main uses of alkaline sodium silicate is as a binder in the manufacture of refractory materials, such as ceramics and fire-resistant coatings. It is also used in the construction industry as a concrete sealer, an adhesive for tiles and bricks, and as a soil stabilizer.

Neutral Sodium Silicate: One of the primary uses of neutral sodium silicate is as a binder in the manufacture of detergents, soaps, and other cleaning products. It is also used as a coating and adhesive in the paper and textile industries, as well as a flocculant and coagulant in water treatment plants.

Sodium Silicate for construction & ceramic industries: Sodium silicate is also used in the manufacture of ceramics. When added to ceramic glazes, it can increase the hardness and durability of the finished product. It can also be used as a binder for ceramic materials, allowing them to be molded into various shapes before firing.



In the construction industry, sodium silicate is commonly used as a concrete densifier and sealer. When applied to concrete surfaces, it reacts with the calcium hydroxide in the concrete to form a hard, insoluble compound that reduces porosity and increases the strength of the surface. Sodium silicate can also be used as a waterproofing agent for concrete and masonry surfaces.

PHA INDUSTRIES PRIVATE LIMITED

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