

# GLUDAN

We empower the future of  
environmental adhesives

---

✉ Email  
[gludan@gludan.de](mailto:gludan@gludan.de)

☎ Telephone  
+49 4155 49750

🌐 Website  
[www.gludan.com](http://www.gludan.com)



## General info

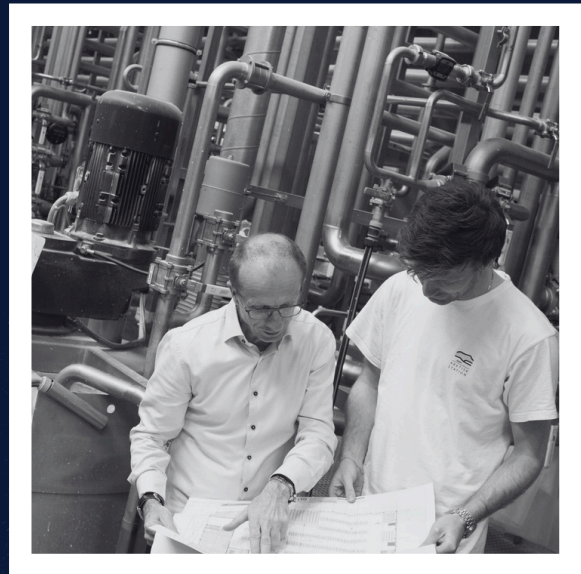
# Leading the green transition with sustainable adhesive solutions

In a time when sustainability and responsible production are more than just expectations – they are requirements – Gludan is a company that leads the way. We produce industrial adhesive products with a clear goal: to combine high performance and reliability with uncompromising environmental responsibility. At Gludan, the green transition is not just a strategy. It is in our DNA.



*“Production based in Northern Germany, Gludan collaborates with market leaders, offering innovative adhesive solutions while actively reducing their CO<sub>2</sub> footprint and investing in sustainable practices”*

*“Gludan is a leading company in industrial adhesives, combining high performance with environmental responsibility, focusing on sustainability and green technology”*



We know that our customers – whether they work with packaging, cardboard, or technical solutions – need adhesives that both perform and meet the growing environmental demands from their own customers, partners, and authorities. This is exactly where Gludan stands out. Our products are developed with respect for resources, people, and the environment – without compromising on strength, adhesion, and flexibility.

## *History*

# History in the making

Based in Büchen, Northern Germany, with customers across Europe and beyond, we don't just supply adhesives – we deliver collaboration, development, and innovation. We understand the complexity of modern production lines and offer technical support throughout the entire process, from development to implementation. Our customers are often market leaders themselves – and they need suppliers who think long-term, act agilely, and document their efforts.

**1977**

Gludan was founded in Herlev, Denmark, starting as a classic adhesive company and expanding into an environmental leader in the adhesive industry across Europe

**1978**

Solvent free production implemented

**1989**

Gludan is expanding – Second Production in Büchen, Northern Germany

**2003**

Phthalate free production

**2012**

New plant in Büchen is build

**2013**

First solar panels are installed (4000sqm)

**2022**

Gludan measured and reduced its CO<sub>2</sub> footprint, totaling 38,700 tons of CO<sub>2</sub>, while targeting key emission sources and publishing results for full transparency

**2023**

Expansion of Plant in Büchen is done + extra 3000 sqm solar panels

**2024**

Eco-line products are introduced



## *Solar panels*

# Gludan runs production with its own power

At Gludan, green energy is not just an ambition for the future – it is a reality in our operations today. The majority of our production facilities in Büchen are currently powered by our own electricity generation through an advanced photovoltaic system covering the roofs of both old and new building sections. In total, we have installed more than 7,000 m<sup>2</sup> of solar panels, which is the largest privately owned PV system in the region within adhesive production.

We stand out clearly from many industrial companies by not just buying green electricity – but producing it ourselves. This means maximum transparency, real emissions savings, and no dependence on fluctuating green certificates.

### **Our system consists of two separate systems:**

- 192.4 kWp on older building sections
- 370 kWp on new building
- Total capacity: 562.4 kWp

This means that we save about 363 tons of CO<sub>2</sub> each year – equivalent to the emissions from over 70 households' annual electricity consumption. This is not just a figure on paper – it's a concrete contribution to our customers' climate accounting as a lower production footprint with us means lower indirect emissions (Scope 3) for you.





# Building a brighter tomorrow with advanced solar panel technologies

The electricity we do not produce ourselves is covered by certified green electricity from E.ON, ensuring that our total electricity consumption is CO<sub>2</sub>-neutral. Our documentation is public and audited by independent organizations, and it can be directly used in our customers' ESG reporting or climate documentation.

For our customers, this means that Gludan is not just a producer – but a partner actively reducing their indirect environmental impact. We provide adhesives with a lower CO<sub>2</sub> footprint, which makes a difference both in competition and compliance.

## Solar panels as part of a larger whole

Our solar panel system is part of an integrated energy strategy that also includes geothermal heating, LED lighting, energy-efficient machinery, and heat recovery. For us, sustainability is not about standalone solutions – it's about a cohesive system that ensures maximum efficiency and long-term value creation.

The sun's energy doesn't just drive our factory – it drives our ambitions.





## *Green Mobility*

# An electric engine in our environmental strategy

In the adhesive industry, transportation is often an overlooked factor when it comes to climate responsibility. But at Gludan, this is precisely where we have made a significant impact. Our decision to electrify the company's vehicle fleet is not just a symbolic gesture – it is a concrete part of our climate accounting and a strategic priority in our CO<sub>2</sub> reduction.

Today, Gludan's fleet consists of 19 electric cars and 3 hybrid cars, meaning that we cover the vast majority of our daily company travel with zero-emissions vehicles. All company cars are charged with self-produced solar energy from our PV system, and the remaining power is provided as certified green electricity. The result? CO<sub>2</sub> emissions from company travel have been reduced to an absolute minimum – and we can document it black and white.





# Documented low footprint – also in the logistics chain

But we don't stop at internal vehicles. Our commitment to responsible transportation also extends to our collaboration with external logistics partners. We prioritize suppliers who can deliver by truck with high loading rates and short routes, and we plan deliveries to minimize empty runs and overlaps. The result is a logistics solution that both reduces CO<sub>2</sub> and maximizes efficiency.

Furthermore, we work with engine-free loading and unloading procedures: Tank trucks for liquid raw materials and bulk adhesives are connected to our system via compressed air, so the engine remains off during unloading. On average, we handle three tank trucks per day – each with 3 hours of unloading time. This results in a significant emissions saving and shows how small adjustments in practice can make a big difference.



## Green mobility as a sales parameter

For our B2B customers, this is not just interesting – it is valuable. When you choose Gludan as your adhesive supplier, you partner with a company that has thought through the entire value chain.

This means your Scope 3 emissions will be lower, your green profile will be stronger, and your documentation will be easier.

Gludan moves forward – electrically, efficiently, guided by responsibility.



## *Water system*

# Sustainable water systems

Water is a critical resource in industrial adhesive production. At Gludan, we have rethought our approach to water – and established a system that combines efficiency, responsibility, and sustainability. Our environmental strategy is based on the principle of circular usage. We don't just want to reduce consumption – we want to reuse and recycle where technically possible. This has led to investments in both rainwater collection, internal wastewater treatment plants, and efficient IBC washing systems.



In a time when many companies struggle to document responsible water management in their supply chain, Gludan is ahead of the game. Our solutions are well thought out, implemented, and fully documentable. We help you meet the requirements of customers, authorities, and ESG standards – with strong facts and real results.





## **5 Million liters of water – reused instead of wasted**

With more than 500 m<sup>3</sup> of rainwater capacity, we collect and use up to 5 million liters of rainwater annually in our production. The water is primarily used for technical processes, cleaning, and secondary needs, which significantly reduces our dependence on local drinking water. At the same time, it minimizes our contribution to flooding and strain on the sewer system during rainfall periods.

The system is fully automated and connected to real-time monitoring to ensure optimal use and documentation – something our customers appreciate, especially when they need to report their indirect water footprint.

### **Advanced cleaning and reuse of process water**

Additionally, we have established an internal wastewater treatment facility that processes and recycles wastewater from both our production activities and our IBC cleaning system. This allows us to reuse a significant portion of our wastewater multiple times, substantially reducing the amount we discharge and minimizing our environmental impact.

This technology has two advantages: it saves resources and reduces environmental impact, while also ensuring high hygiene standards and operational reliability in our production. For our customers, this means that they receive adhesive products manufactured under controlled, certified, and environmentally optimized conditions.



## *Geothermal*

# Natural heat from the Earth's core

While many companies talk about sustainability, Gludan has chosen to act – and invest. One of our most ambitious initiatives is the implementation of geothermal heating that covers the entire new building mass at our factory in Büchen. This is a clear example of how green technology and modern industry can go hand in hand.

Our geothermal facility uses 42 deep earth drillings to exploit the stable heat below the surface to warm production and office facilities. It covers a total of 5,200 m<sup>2</sup> of our facility – both ground floor and first floor – with comfortable, even heat year-round.

## **A self-sufficient and emissions-free heating system**

Geothermal energy is one of the most CO<sub>2</sub>-neutral forms of heating because it draws its energy directly from nature – without combustion, smoke, or the emission of harmful substances. There are no boilers that need servicing, and no fossil fuels that need to be transported.

The system is powered by electricity, which at Gludan primarily comes from our own solar panels and certified green electricity. This means the entire heating supply is effectively emissions-free.

This gives us as a company – and our customers – a clear advantage: We can document extremely low Scope 1 and 2 emissions, which reduces our overall product carbon footprint. This becomes your competitive advantage in a world with growing focus on climate and documentation.







## *Biodiversity*

# More than just green words

At Gludan, we believe that industrial production and biodiversity should not be opposed to each other. On the contrary, we want to prove that modern industry can be a co-creator – not an opponent – of a healthy and varied ecosystem. Therefore, we have integrated biodiversity as a strategic part of our environmental efforts.

Our factory in Büchen is surrounded by 9,500 m<sup>2</sup> of green spaces, which are intentionally laid out to support nature's balance. Here we have planted 23 new trees and created natural zones with grass, wildflowers, and bushes that attract insects, birds, and small animals. It's not just about aesthetics – it's about creating living, functioning ecosystems in the middle of the industrial landscape.

## **Insect hotels with purpose – not decoration**

One concrete initiative we are particularly proud of is the installation of insect hotels and bee habitats. These small but effective constructions provide safe nesting places for bees, butterflies, and other pollinators, which have been under pressure across Europe for many years. At Gludan, we have placed several hotels on the factory grounds. At the same time, it sends a strong, visible signal to employees, visitors, and partners that sustainability at Gludan extends beyond internal processes and directly into the ground.



## *Cleaning system*

# Precision cleaning systems designed for modern demands

We recognize that in modern adhesive production, cleanliness is not just a requirement—it is crucial for ensuring quality, stability, and safety. Instead of treating cleaning as a burden, we have made it an integral part of our commitment to sustainability. Our IBC cleaning system is specifically designed to ensure high levels of hygiene while maximizing resource efficiency.

Through this system, we minimize our environmental footprint by reusing process water, reducing waste, and optimizing operations. This approach not only supports our environmental goals but also enhances the overall quality of our products and ensures safety in every stage of production. Cleaning is not just a necessary task; at Gludan, it's a key part of our dedication to sustainability.





# Precision cleaning systems designed for modern demands

Our IBC washing system processes approximately 130 m<sup>3</sup> of water annually, water that would traditionally be discarded as wastewater in many other systems. Rather than allowing this valuable resource to go to waste, we have developed an advanced filtration and purification process that cleans and reuses the water in subsequent washing cycles. This innovative approach significantly reduces overall water consumption, while also alleviating the strain on municipal wastewater systems. By reusing this water, we not only contribute to water conservation efforts but also minimize our environmental footprint.

To ensure the highest hygiene standards, the quality of the purified water is continuously monitored and digitally documented throughout the process. This rigorous oversight provides both us and our customers with the confidence that hygiene is never compromised, regardless of how many times the water is recycled. Additionally, our closed-loop system brings operational benefits by reducing the need for external resources, such as fresh water and chemicals. It also minimizes waste generation, contributing to a more sustainable production process and enhancing overall operational efficiency.







## Certificates, ISO

# Certificates and ISO Standards

In a world where green promises are many, but concrete actions are often lacking, documentation has become crucial. B2B customers are increasingly looking for suppliers who not only talk about sustainability but who can document it – and who actively contribute to the customer's own climate efforts. At Gludan, we have made transparency and credibility core values.

That is why, in collaboration with ClimatePartner, we have conducted a full Corporate Carbon Footprint (CCF) analysis of our entire production. The result speaks for itself: Our total CO<sub>2</sub> emissions in 2022 were 38,699 tons, of which 99.5% came from Scope 3 emissions – i.e., the indirect impacts from raw materials, transportation, and waste management.





*ECO Line*

## ECO and BIO-C Products

At GLUDAN, we recognize our responsibility towards the environment and offer specialized ECO products to meet the growing demand for sustainable solutions. These products are crafted using environmentally friendly processes, ensuring that they are produced with a reduced ecological footprint. The ECO line, in particular, stands as a testament to our commitment to sustainability, offering a greener alternative to conventional adhesives.

### **Sustainable and efficient**

Our ECO line is crafted to reduce environmental impact while delivering top performance. These adhesives are made using sustainable processes that prioritize renewable resources, offering a more ecofriendly alternative to traditional products.

By choosing ECO products, you're supporting a greener future, as these adhesives are produced with minimal waste and a lower carbon footprint.

While maintaining the same high standards for performance, compliance, and composition as regular adhesives, the ECO line stands out for its commitment to sustainability and environmental responsibility.





A black and white photograph of an industrial facility, likely a water treatment plant. It features a complex network of large pipes, valves, and several large cylindrical storage tanks. The scene is viewed from an elevated perspective, showing the scale of the infrastructure.

# GLUDAN

**Trusted by over 1,000 clients, we deliver  
high-performance adhesive solutions across  
a wide range of industries.**

**Tel:** +49 4155 49750

**Mail:** [gludan@gludan.de](mailto:gludan@gludan.de)

---

Am Hesterkamp 2 21514 Büchen Germany | [www.gludan.com](http://www.gludan.com)