



**Caring today.
Enabling tomorrow.**

**A fresh new player in the
Heparin market**



Fair, intelligent, collaborative, independent

We are a fresh, new player on the heparin market. Fair dealings with our business partners lay the foundations for expanding Germany's production capacities of the life-saving active ingredient heparin, increasing security of supply in Europe.

Intelligent concepts for strong partners

A reliable supply of heparin is crucial for our health. To put this in place, we trust in strong partnerships based on fairness, openness and transparency.

Active ingredients that save lives

The World Health Organization (WHO) describes heparin as one of the most important life-saving drugs. As an anticoagulant, it prevents the formation of blood clots and is used to treat numerous chronic cardiovascular conditions. It's virtually indispensable in invasive medicine. Helaxa manufactures active ingredients for the production of this crucial drug.



Greater security of supply for heparin

Strong, pan-European partnerships in the supply chain, large manufacturing capacities and cutting-edge production facilities make us independent of third markets and lay firm foundations for security of supply.

More than a new name

Helaxa is more than just a new name in the Heparin market. We are dedicated to promoting the well-being of people and the sustainability of the healthcare system. We offer close collaboration and transparent communication with our partners. Our expert team, specializing in various fields from tech ops to sales, is committed to excellence and providing innovative solutions. Our facility utilizes automated, lean production with minimal energy consumption, powered by renewable resources like solar panels and biogas waste disposal. We offer a top-tier product with full traceability from high-end raw materials.

When you work with us, we provide the best quality products at a competitive price

Pharmaceutical Products

Heparin Sodium API

- Heparin Sodium is a highly purified, unfractionated heparin in the form of the sodium salt. It is a sulphated polysaccharide from the group of glycosaminoglycans, obtained from the mucous membrane of the mammal intestine.
- Role as active ingredient: Heparin Sodium is a pharmaceutically applicable active ingredient (API) that is produced according to recognized pharmaceutical standards.
- Average molecular weight range: approx. 12,000–16,000 daltons.
- Quality standard: Compliant with the applicable pharmacopoeia (Ph. Eur., USP, BP).
- Application & Helaxa advantage: Anticoagulant for the prophylaxis and treatment of thromboembolic events, as well as for the prevention of blood clotting in medical devices and dialysis systems. This is a critical medicine according to the European Critical Medicines Act and the WHO list of essential drugs. Quality standards are paramount. Having a fully integrated supply chain allows full traceability and control of the entire process, securing the optimal product gets to the patients.

Heparin Crude

- Heparin Crude (or Crude Heparin) is an unpurified intermediate derived from mammal small intestinal mucosa. It contains heparin in a non-standard form as well as other natural accompanying substances.
- Role as starting material: Heparin Crude serves as a biological raw material for the industrial production of purified heparin APIs and related glycosaminoglycans. Further processing includes multi-stage cleaning, standardization and quality control procedures.
- Average molecular weight range: approx. 5,000–40,000 daltons.
- Quality standard: In-house specifications.
- Advantage: Helaxa is back integrated from mucosa to produce in house crude heparin. An efficient supply chain and strong long-term association with European partners allows Helaxa a full tracking and control of the raw materials to secure our crude heparin.

Heparinoid

- Heparinoids are glycosaminoglycan-like substances, co-products from the purification process of the Heparin and structurally complex polysaccharide mixtures.
- Role as starting material: Heparinoid is used as an industrial intermediate to produce other anticoagulant agents or special

medical products where targeted adjustment of the molecular structure or purity is required.

- Average molecular weight range: > 15,000 Daltons.
- Quality standard: In-house specifications.
- Application: Starting material for further purification steps for the extraction of anticoagulant substances.

Heparin Calcium API

- Heparin Calcium is a purified, unfractionated heparin in the form of the calcium salt. It has comparable pharmacological properties to heparin sodium, showing slightly stronger inhibition of Factor IIa (thrombin) than sodium, generating less local irritation and lower risk of ecchymosis when injected, being the preferred form in subcutaneous injections and hemodialysis.
- Role as active ingredient: Heparin Calcium is a pharmaceutically active ingredient (API) manufactured in accordance with recognized pharmaceutical standards.
- Average molecular weight range: approx. 12,000–16,000 daltons.
- Quality standard: Compliant with the applicable pharmacopoeia (Ph. Eur., USP, BP).
- Application: Mainly for long-term subcutaneous administration in the treatment and prophylaxis of venous thrombosis.

APIs in development

- Other glycosaminoglycan-based substances with anticoagulative or related pharmacological effects. Depending on the state of development, these substances are classified as research APIs or as biotechnologically produced starting materials. The aim is to optimize efficacy, purity and stability.
- Average molecular weight range: product-specific variable.
- Quality standard: In-house specifications.
- Application: Improvement of thrombosis prophylaxis, development of alternative forms of application and use in innovative biomaterial coatings.



By-products

Protein hydrolysates

Protein hydrolysate has a very specific amino acid profile with a high level of free amino acids. This characteristic makes the protein hydrolysate suitable for application as feed, petfood and bio stimulants. Helaxa can offer various concentration grades from liquid to abt. 50% concentrate.

Applications:



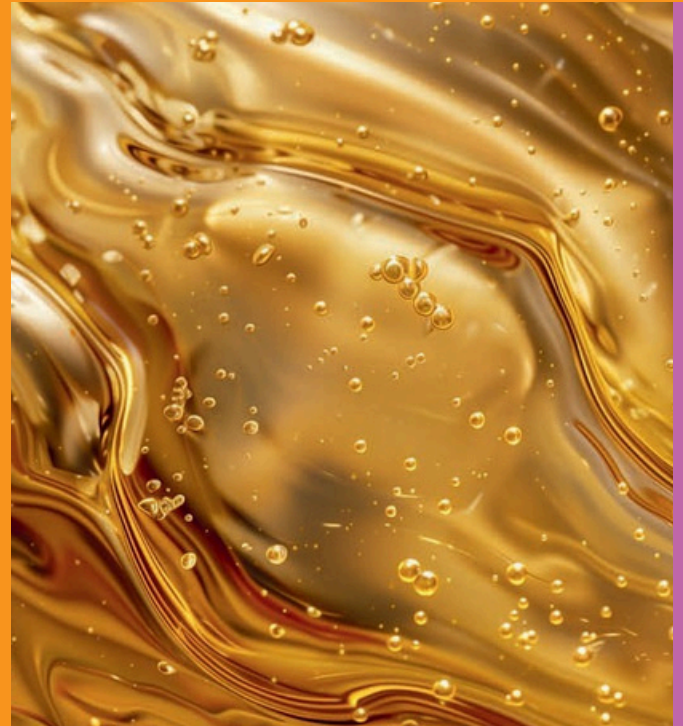
Feed, aqua-feed & pet food



Bio stimulant for plants under stress



Biogas: feedstock to generate green energy



Industrial fat

Industrial fat is obtained by separation from the heparin extraction process. It consists mainly of neutral lipids and fatty acids with a defined quality profile. The material is processed and standardized for use in industrial applications such as:

1. Oleochemical industry: as raw material for the production of soaps, fatty acids, or biodiesel.
2. Technical applications: as a basis for lubricants and other industrial formulations.
3. Raw material for sustainable green fuel.

Its consistent composition and origin from a controlled process make it a reliable raw material stream within the animal by-product valorization chain.



*We've assembled a dream team
with decades of experience in the heparin market.
Our vision is to establish Germany's most cutting-edge
and innovative heparin production facility.*



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