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## **BIODEQ**

## REVOLUTIONARY TECHNOLOGY UNLOCKING THE POTENTIAL OF SUNFLOWER PROTEIN ISOLATE.

Introducing Sunflower Protein Isolate – Revolutionizing the Plant-Based Food Market

At Biodeq GmbH, we are an innovative agrifood startup leading the charge in the development of highly efficient plant-based proteins. Our primary focus lies in harnessing the power of sunflower seeds to create a game-changing product – Sunflower Protein Isolate (SFPI).

Sunflower Protein Isolate (SFPI) is at the forefront of our revolutionary technology, offering superior characteristics for the rapidly growing plant-based food market.

We have successfully developed a unique process that extracts protein isolates from sunflower meal and other by-products, unlocking its untapped potential as a sustainable protein source. In today's global plant-based food market, challenges surrounding protein sources are abundant.

A staggering 80% of existing proteins are genetically modified organisms (GMOs), while non-GMO alternatives remain prohibitively expensive. Moreover, approximately 4% of the adult population suffers from food allergen issues, and certain protein isolates, such as pea protein, can lead to digestive problems.

Recognizing the untapped potential of sunflower seeds as a protein source, we set out to create a protein isolate from these seeds. However, extracting the protein while preserving the phenolic components, like chlorogenic and caffeic acids, proved to be a significant challenge. These phenolic components needed to be removed to make the protein suitable for food applications and organoleptically friendly. The existing methods for removing these phenols were costly, impeding scalability, and significantly affecting the price of SFPI.

To surmount these obstacles, we have developed an ingenious, low-cost protein extraction process from sunflower meal, resulting in a product with exceptional organoleptic properties.

Our SFPI is a game-changer, boasting an impressive protein level of over 85%, allergen-free, NON-GMO, and boasting minimal flavor profile. Even more remarkable, our SFPI is almost white in color, an extraordinary feat considering the presence of phenolic elements.

The versatility of our Sunflower Protein Isolate opens doors to a wide range of applications, including plant-based dairy, yogurts, meat alternatives, and traditional food items. Whether you're an individual looking for healthier alternatives or a food manufacturer seeking innovative ingredients, our SFPI has got you covered.

Behind our groundbreaking product lies our exceptional technology, seamlessly blending electromagnetic and biotechnology processes within a closed water-based cycle. This cutting-edge approach ensures sustainability and reinforces our commitment to environmentally friendly practices.

Join us on our journey to shape a greener and more sustainable future through plant-based innovation. Together, let's redefine the agrifood landscape and make a positive impact on our planet.



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