

# **GluECO Adhesives LLC** Adhesives • Coatings • Binders

Biobased Ingredients Sustainable Manufacturing Food Contact Safe Compostable | Repulpable



A Flo Enterprises company FloZein Products • GluECO Adhesives • Zein Ventures

## **Mission Statement**

GluECO Adhesives is set to revolutionize the adhesives industry by providing a sustainable solution that is plant-based, eco-friendly, biodegradable, food-safe, compostable, recyclable, and repulpable. Together with our partners at FloZein Products, the top producer of Zein corn protein, we are creating a series of adhesives, coatings, and binders that will satisfy the needs of various industries while minimizing waste and limiting the release of hazardous substances into the environment.

# **Current Products**

### **BondAmaize™ Adhesives**

- Biobased adhesive which can be easily fine-tuned to achieve performance characteristics for specific applications and materials.
- Produces a clear, flexible film which is ideal for use as a laminating adhesive for flexible food packaging.

#### DermAmaize<sup>™</sup> Dermal Film

- Produces a very thin, clear, flexible, and skin-safe film that delivers and protects both active and passive ingredients to the skin.
- "Challenging" additives, such as complex oils that tend to separate from their carrier material, are securely cross-linked to zein.
- Longer protection and heavier loading the current chemistries.

#### **AmalgAmaize™ Binder**

- A specialty polymer, which, when combined with agricultural waste products (bagasse, hemp, etc.), can be molded, extruded, and machined to manufacture composite materials.
- Performance characteristics of the product (strength, flexibility, fire retardancy, etc.) can be easily achieved by varying the polymer formulation.

GLUECO

Biobased Compostable Biodegradable Food Safe Recyclable

Founded in 2022, GluECO Adhesives LLC provides sustainable and eco-friendly biobased adhesives and polymers for a wide array of applications across multiple industries, from flexible food packaging and textiles to cosmetics and composite materials.

#### Adhesives

#### Dermal Films Biomass Binders

BondAmaize<sup>™</sup> DermAmaize<sup>™</sup>

AmalgAmaize<sup>™</sup>

Biobased adhesive Creates a clear, flexible film for laminating flexible food packaging Provides strong bonding capabilities for woodworking and other applications Available in liquid or hot melt solid forms Delivers a thin, clear, conforming and flexible layer to deliver active and passive ingredients Provides complete coverage for extended periods of time, even in high moisture environments. Specialty polymer that can be combined with agricultural waste products to manufacture more sustainable composite materials Provides strength, flexibility, and fire retardancy to composites

#### All GluECO products are customizable to specific performance characteristics and end product needs

#### **Need More Info?**

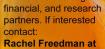
Contact us today to learn more about our sustainable and eco-friendly biobased adhesives and polymers

Phone: +1 (978) 827-5116 Email: drosen@glueco-adhesives.com Website: www.glueco-adhesives.com

We look forward to hearing from you and discussing how our products can meet your specific needs

GluECO is committed to environmentally responsible sourcing and manufacturing.

a FLO ENTERPRISES company



GluECO is seeking strategic.

Interested?

rfreedman@gluecoadhesives.com



# Sustainable Products, Sustainable Company

Our commitment to sustainability is demonstrated through our eco-friendly raw material sourcing, green manufacturing processes, and production of fully sustainable products.

### FEEDSTOCK

- By-product of corn starch production which is used for animal feed
- Zein protein extracted
- Sold for animal feed with improved amino acid profile



## **RECOVERY/RECYCLE**

• Feedstock is upcycled

 Ethanol and water used in process are recovered and reused

### FORMULATIONS

- Biobased material are used, when available
- All products are vegan, kosher, and GRAS
- Compostable, Biodegradable, Repulpable







**High Performance Products** 

### Zein's Unique Qualities



Sustainable: biodegradable, compostable, repulpable, renewable feedstock, upcycling



Vegan, GMO free, Kosher, Generally Recognized As Safe (GRAS) by the US-FDA



Forms a clear, durable film which is water insoluble



Forms a clear, durable film which is a highly effective water, oxygen, and grease barrier



FDA registered USA-based manufacturing facility

## GLUEC

Certified

Women's Business Enteroris





USDA Certified 98% Biobased content (BondAmaize<sup>™</sup> Adhesive)



Tunable Formulations: Easily customized for specific performance and ambient requirements



Non-reactive: will not chemically alter other ingredients



Strong crosslinker: Excellent carrier for other ingredients.



Cost effective since less product is required to achieve performance objectives.