



THERMOPLASTIC STARCH

Made in Austria.

100 % BIO-BASED. HOME-COMPOSTABLE. SUSTAINABLE.

AGRANA AT A GLANCE

BRANCHES

- STARCH – FRUIT – SUGAR

EMPLOYEES

- More than 9.000

KEY MATERIALS

- Bio-based raw materials: maize, wheat & potato

KEY PRODUCTS

For the plastic industry:

- AMITROPLAST® – Specialised thermoplastic starch: The perfect ingredient for compounds for film blowing, injection moulding and 3D printing.
- AGENACOMP® – Home compostable compounds for film blowing.

AGRANA –

The natural upgrade

adds value to agricultural commodities to produce top quality foodstuffs and numerous industrial upstream products. AGRANA is today the leading sugar company in Central and Eastern Europe as well as being a key producer, in the Starch segment, of special products and bioethanol in Europe.

In addition, AGRANA is the global leader in fruit preparations and a major producer of fruit juice concentrates in Europe. We transform almost 100 % of the employed raw material into value-added products using low-emission technologies.

R & D

The journey of implementing sustainable solutions to ensure the fulfillment of today's and future demands is just in its beginnings.

AGRANA employs a significant number of scientists and technicians who conduct applied research and customer oriented product development.

Strengthening sustainable partnerships is our motivation, whereby confidentiality and technical support are guaranteed.

AMITROPLAST® THERMOPLASTIC STARCH

Our expertise in BIOPLASTICS

Starch is an amazing and very versatile material, making it an important base for modern bioplastics. In the production of bioplastics, AGRANA uses its strong and unique expertise in the production and processing of starch and combines this with the knowledge of the needs of the plastics industry.

AMITROPLAST – an important ingredient in your bioplastic compound

With the AMITROPLAST product family, AGRANA provides a user-friendly thermoplastic starch for extrusion, film blowing, injection molding and 3D printing.

Our AMITROPLAST products allow users to incorporate significant amounts of thermoplastic starch into bioplastic compounds and thus, to create tailor-made polymer compounds that are processable by using standard polymer equipment and capable of adding extra value to innovative products.



BIO-BASED. HOME-COMPOSTABLE. SUSTAINABLE.

OUR STARCH

- Non-genetically modified
- Renewable and regional raw material

OUR AMITROPLAST

- Biodegradable
- Home-compostable
- Bio-based
- The way to your value-added bio-polymer compound

YOUR COMPOUND

Combination of AMITROPLAST® with bio-polymers and other ingredients

YOUR PRODUCT

Tailormade products with customized properties

AMITROPLAST – your TPS for extrusion and injection

Extrusion & Thermoforming

- Carrier bags
- Fruit and vegetable bags
- Protective Packaging
- Waste bags & bin liners
- Non woven fibers
- Technical films
- Forestry applications
- and many more

Injection Molding

- Agricultural clips and guides
- Plant pots
- 3D print filament
- Cutlery
- Packaging
- Sanitary products
- and many more



Trays



Bags



Film



3D-Print



Plant pot

AMITROPLAST® – properties and applications



BIO-BASED

AMITROPLAST has a bio-based carbon content of 100 % and allows you to reach easily 40 % of renewable resources or more in your products.

FILM

A 20 µm film, based on a compound that consists of 40 % AMITROPLAST and 60 % PBAT (polybutyleneadipate-co-terephthalate) results typically in an extensibility of approximately 300 % and a tensile strength of 35 MPa.

STRETCHING

Stretching increases the tensile strength, whereby values in a range of 60 MPa are accomplished (depending on the applied draw-ratio).

NO SMOKE

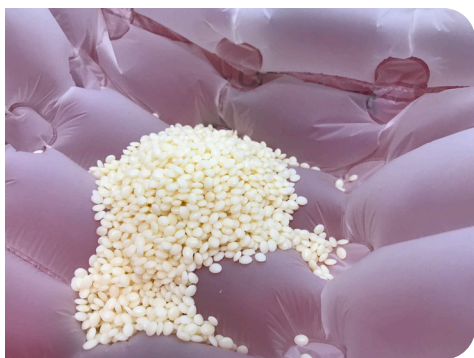
The new technology of AMITROPLAST significantly reduces the development of smoke during film blowing.

INJECTION MOLDING & THERMOFORMING

AMITROPLAST can be applied for compounds for injection molding and thermoforming processes.

RECYCLING

Compounds containing AMITROPLAST can be recycled and fed back into the process.



CERTIFICATIONS

AMITROPLAST is bio-based, bio-degradable and can be disposed of in a home or industrial composting environment.



Based on EN13432: Degradation of 90% of the starting material into CO₂, water and minerals within 6 months at industrial compost conditions (60°C)



Degradation of 90% of the starting material into CO₂, water and minerals within 12 months at home composting conditions (30°C).



★ 20 to 40% biobased
★★ 40 to 60% biobased
★★★ 60 to 80% biobased
★★★★ 80 to 100% biobased

BIO-DEGRADATION & COMPOSTING

AMITROPLAST is home-compostable and improves the compostability of your extruded and injected products significantly.

BIO-DEGRADATION AT HOME-COMPOST CONDITIONS (28 °C AND LESS)

	start	after 2 weeks	after 4 weeks
15 µm film (50 % AMITROPLAST® and 50 % PBAT)			



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THE NATURAL UPGRADE