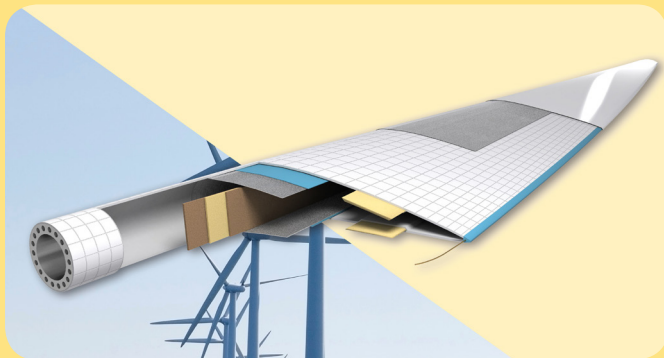


INFO:
Raw Material



PUR 150 Energy

A cost-efficient raw material,
suitable for lightweight parts in windmill blades

TINBY

Snavevej 6-10, DK-5471 Søndersø, www.tinby.dk
Quality | Security of Supply | Technology | Competitive prices

Special Properties

PUR 150 Energy is a polyurethane blend that is able to withstand high temperatures. This material can be used with different types of core materials and is suitable for casting complex items of varying thickness.

As this raw material provides a tough finished product and even materials with very thin dimensions do not become brittle. Thus, the item becomes durable, shock resistant and easy to work with.

PUR 150 Energy is a raw material that lets you mould large, complex items. This material is easy to process and thus cost-effective when used in manufacturing, resulting in a competitive end product. The surface is easy to sandblast and treat, and can be adapted to all geometrical forms. This material is easy to combine and mould with other construction materials and is well suited to the production of for example wind turbine blades.

Within the wind turbine industry **PUR 150 Energy** is used because of its low density, its durability and wide range of uses.

Polyurethane for the windmill industry | We offer project oriented polyurethane solutions as parts such as blade cores, balance elements, vacuum films and bags or lightning conductors. We cooperate with the market's strongest raw material providers of thoroughly tested and documented raw materials. We develop the polyurethane solution that is best suited to solve the customer's job – in cooperation with the customer.

It can be used, among other things, as a viable alternative to balsa wood.

Typical data:

Property	Value	Unit	Norm
Material:	Polyurethane		
Color:	White		
Density:	150	[g/l]	
Comp. strength: parallel with skin perpendicular to skin	1,8 1,8	[mPa]	ISO EN 826
E-module, comp.: parallel with skin perpendicular to skin	45 47	[mPa]	ISO EN 826
Tensile Strength:	2,1	[mPa]	DIN53430
E-module, tensile: Core	76	[mPa]	DIN53430
G-module, bending: Core	135	[mPa]	DIN53293
Insulation property:	Appr. 36	[mW/mK]	ISO 8301

Lighting connectors for windmills | Polyurethane has some unique benefits in relation to lighting connectors for windmills. The benefits are obtained by mixing the raw material according to a formula that ensures a thermally stable polyurethane with good dielectric features (= low electrical conductivity) and extreme strength. All our solutions are specially designed in close cooperation with the manufacturer.

- Tinby offer project management and development cooperation.
- We have the most extensive knowhow, experience and knowledge about polyurethane and production processes.
- We deliver reliable quality on time.
- We operate on a global scale.
- We have unique competencies with regard to proto types and trials.
- We provide customised solutions
- Our flexibility is a decisive factor in our customers getting the product they want. For instance, we acquire the machinery we need to solve a job, set up the production facility, etc.
- We are a strong company backed by a strong group, i.e. the listed SP Group A/S.



Do you have an idea you would like to test with us?

Then please contact our Sales and Project Manager Michael V. Therkelsen on telephone no

+ 45 51 18 26 39 or e-mail
mvt@tinby.dk.