



# PUR 1150 Solid

## High-grade polyurethanes for protection of lightning defectors

INFO:  
Raw Material

**TINBY**

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

### Application

PUR 1150 Solid is a rigid polyurethane system, used for encapsulation and protection of lightning defectors. It can be moulded in widely varying thickness.

### Special Properties

PUR 1150 Solid is used as integral parts of electrical and electronic components. It protects live parts by acting as an electrical insulator and by dissipating heat.

Polyurethanes have been used successfully in electrical engineering for over 35 years. Major fields of application now include the sheathing, fixing, embedding and encapsulation of electrical components with solid, bubble-free polyurethane systems. Tinby satisfies the demands of the various industries with PUR 1150 Solid.

Characteristics of this raw material includes a minimal inherent heating during curing, quick curing using catalysts with minimal stress and shrinkage, low pressure on encapsulated components due to shrinkage. A good adhesion and resistance to chemicals and an attractive cost/performance ratio.

**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.

These advantages result in commercially attractive, technically superior solutions in the various sectors of electrical engineering.

Property	Value	Unit	Standard
Material:	Polyurethane		
Color:	White		
Densitet:	1150	[kg/m <sup>3</sup> ]	EN 1602
Dielectric strength:	23 ± 2	[KV/mm]	
Hardness:	60-80	[shore D]	DIN 53505
Tensile strength:	62	[MPa]	DIN 527
Tensile strength at break:	62	[MPa]	DIN 527
Elongation at break:	4	[%]	DIN 527
Elongation at max load:	4	[%]	DIN 527
E-modulus (tensile):	3420	[MPa]	DIN 527
Tg (TMA, onset):	60	[°C]	
Coefficient of thermal expansion (-30 to 60°C):	85	[ppm/K]	

**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 offers

- 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 – “off-the-shelf” solutions are non-existing.
- 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.
- We know that windmill and development projects in general are delicate matters with regard to confidentiality – these are conditions under which we are used to work.



### 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

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