



**SUNLUX®**

Metal & Eco-screen by  
**Blind Solutions®**

## GLARE CONTROL FABRICS MADE FROM PLANTS

Sunlux® Fabrics Division developed a new generation of glare control fabrics that leave other materials trailing behind.

### Made from annually renewable materials instead of oil

Sunlux® Fabrics Division is the first sunscreen fabric in the world awarded Cradle to Cradle Certified™ Gold with a Platinum Material Health certificate.



Sunlux® Fabrics Division is made from **PLA (PolyLactic Acid)** named **INGEOTM**, which is a biopolymer.

The production of this PLA biopolymer compared to conventional “polyester” polymer:

- requires 42,9% less energy
- causes 77,3% less CO2 emissions

### HOW IS IT MADE?

Sunlux® Fabrics Division is made by extracting sugars from plants grown annually. These sugars are converted into a revolutionary material, which is now being used to produce these ecologically advanced glare control fabrics.

## How is textile made from plants?

### CAN A NEW GLARE CONTROL FABRIC MAKE THE DIFFERENCE?

At Blind Solutions® we think it can! We set ourselves the challenge of developing glare control fabrics of the highest quality that surpassed our current sustainability requirements.

# Sunlux® Metal & Eco-screen by Blind Solutions®

Technical accuracy and market insight into the client's requirements and wishes led to the development of a new generation of glare control fabric, made from renewable raw materials.

Sunlux® Fabrics is not made from the standard polyesters used for conventional glare control fabrics but from Ingeo™, an ingenious new material that is 100% extracted from annually renewable vegetable raw materials rather than from oil. Sunlux® Fabrics meets the same performance standards as polyester fabrics. It is very stable and durable. Less fossil fuels are also used in the production of the raw materials and less greenhouse gases are produced in comparison with the traditional polymers used for synthetic fibres.

## WHAT IS THE DIFFERENCE?

Did you know that replacing 25,000 square metres of glarecontrol fabric made from polyester with equivalent 170 GSM material made from Ingeo™ Fibre is equal to the following:

- » burning 3,837 litres of petrol
- » burning 1,096 gallons of gasoline
- » monthly electricity consumption by 81 residents in Western Europe
- » monthly electricity consumption by 35 residents of the U.S.
- » monthly electricity consumption by 55 residents of Australia/New Zealand

## FOSSIL FUEL SAVINGS EQUIVALENT TO:

# Sunlux® Metal & Eco-screen by Blind Solutions®

## CO2 SAVINGS EQUIVALENT TO:

- » covering 55,941 kilometres in a new car in Western Europe
- » covering 22,475 miles in a new car in the U.S.
- » covering 43,719 kilometres in a new car in Australia/New Zealand
- » the consumption of 2 cars not driving for one year in the U.S.
- » the storage of carbon by 2 hectares of pine or fir forest for a year
- » the consumption of 342 propane cylinders used for home barbecues
- » the growing of 210 tree seedlings for 10 years

These reductions are estimates, and based on the “cradle to pellet” element of the life cycle. Ingeo™’s ecological profile and the available data on PET are applicable here. The calculations are based on all 170 grams per square metre PET being replaced by the same weight in Ingeo™ fibre and there being no changes to the ecological footprint associated with processing of the polymer to end product later in the production chain.

## SUNLUX® METAL AND ECO-SCREEN

Sunlux® Fabrics is an innovation based on 100% annually renewable vegetable raw materials

Sunlux® Fabrics has outstanding light fastness

Sunlux® Fabrics glare control fabrics are certified by the STFI

Sunlux® Fabrics is durable and dimensionally stable

Sunlux® Fabrics meets the performance standards for polyester

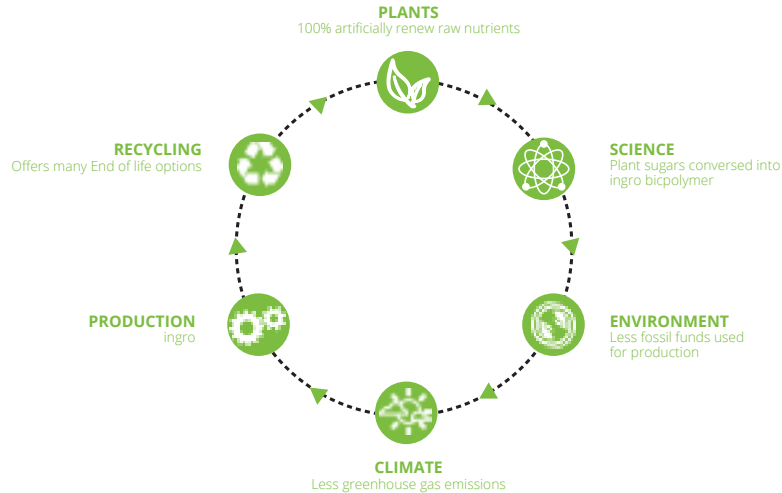
Sunlux® Fabrics uses less fossil fuels from cradle to pellet

Sunlux® Fabrics causes less emissions of greenhouse gases during production\*

Sunlux® Fabrics glare control fabrics contribute to carbon footprint reduction\*

In comparison with traditional polymers used for synthetic fibres

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1. Ingeo™ biopolymers are made from plants. Sunlux® Fabrics bioplastic is composed of long chains of polylactic acid made of natural sugars.
2. Carbon dioxide is absorbed by the plant. Water is absorbed by the plant, through the roots. Sunlight is the energy source used by the plant to convert CO<sub>2</sub> and water into sugar. Glucose (sugar) is used as an energy source by the plant, and stored in the form of starch. This starch is the raw material for Ingeo™ bioplastic. Oxygen is released during this process.
3. The first step is converting the starch from the plant into sugars. These sugars are converted into lactic acid through a fermentation process (also used to make wine and beer). This lactic acid is then linked into long chains called polylactic acid. The polylactic acid is the bioplastic (plastic made from biological raw materials or plants). Nature Works calls this bioplastic Ingeo™.



# Sunlux® Metal & Eco-screen by Blind Solutions®

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INNOVATIONS WITH INGEO

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REVOLUTION OFFERS DIVERSE  
RECYCLING OPTIONS

4. The Ingeo™ bioplastic is converted into a fibre by our partners. This is then spun into a yarn that is used to weave the glare control fabrics Sunlux® Fabrics and Eco-screen. Subsequent processes ensure that the blinds meet high quality standards.
5. After the use phase, the glare control fabrics can be mechanically recycled. In mechanical recycling the plastic is processed back into pellets that can be re-used for a new application. Sunlux® Fabrics products can also be incinerated with energy recovery. This can be used to produce green electricity or steam, since the carbon in the material is from renewable raw materials. If Sunlux® Fabrics ends up in a landfill site it will not break down, so the carbon will be stored in the landfill and a positive contribution will therefore be made to climate change. There is an End of Life Option to compost Ingeo™, but this is still being investigated in the case of Sunlux® Fabrics. The same is true of the chemical recycling route, through which the polymer is broken down into lactic acid again.



## End of life takeback service

Sunlux® Fabrics and Blind Solutions® offers the possibility to take back the Sunlux® Fabrics and Sunlux® Metal fabrics at the end of its life cycle. The fabrics will be mechanically recycled with the highest yield returns possible at a state-of-art recycling plant in Belgium. Of course you can always contact us with questions related to recycling.