

- 100% bio-based PLA polymer
- ✓ 100% industrial compostable
- High intrinsic UV resistance
- Available in different BIO-colours



THE FUTURE IS NOW

Support a cleaner world now and replace oil-based yarns with bio-based yarns in your production!

Consumers, policy makers, brand owners and companies in the value chain are increasingly demanding sustainable solutions, particularly regarding plastics and products thereof. These demands are now also going to affect the fibre, rope and textile markets. With the Senbis PLA 9210 yarn you can make your product more sustainable as you can replace oil-based yarns by a yarn that is made from organic sources such as corn. These bio-based sources are renewable and absorb CO₂ during cultivation.

During the industrial composting of PLA yarn, the product is broken down due to the high microbiological activity as well as by the high moisture and high temperature conditions, into CO_2 , water and humus.

Note: PLA yarn is industrial compostable (**according to EN 13432**) but not biodegradable in environments like soil or water. If you are interested in a soil or water degradable yarn, please contact Senbis regarding the options.



APPLICATION AREAS FOR SENBIS PLA YARN

PLA yarn leads to costs savings for organic waste stream treatments!

A compostable product is of extra added value when it ends up in organic waste streams. Conventional plastic products pollute these streams. Therefore, companies that are disposing these products are confronted with higher waste treatment costs.

Typical industries dealing with organic wastes:

- Horticulture
- Agriculture
- ► Construction
- ▶ Geotextiles
- ► Gardening

Typical applications of the yarn:

- ▶ Twines
- Ropes
- Nets
- Woven products
- Braided products



Horticulture rope with low creep from Senbis PLA yarn!

Specifically for the horticulture industry Senbis has developed a twine with low creep properties made from the Senbis PLA yarn. The twine is used for growing tomatoes, cucumbers and peppers. With this PLA yarn the farmer is not only sustainable but also saving costs on waste treatment.

The horticulture twine of Senbis is exclusively distributed by Royal Brinkman to the horticulture industry under the brand name *BioValent*. Other application areas are still open for new partnerships!

ABOUT SENBIS SUSTAINABLE PRODUCTS

Supplying innovative and sustainable solutions!

Senbis Sustainable Products supplies products that have been developed by the R&D company Senbis Polymer Innovations B.V., which is the former research department of AKZO and later Diolen Industrial Fibers.

The company holds decades of experience in the development and production of polymers and yarns thereof. Senbis Polymer Innovations offers R&D services to the market. Senbis Sustainable Products is one of their customers that has a clear focus on sustainable products related to polymers and yarns.





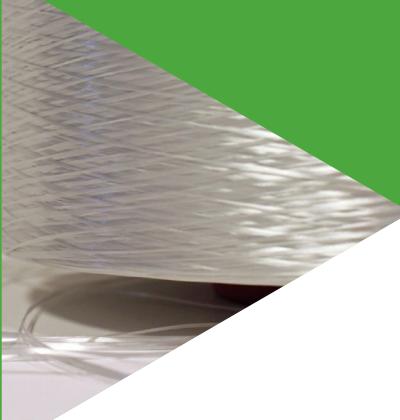
For more information call +31 591 69 2117 or visit www.senbis.com

TECHNICAL DATA

Yarn type	PLA 9210	PLA 9210	PLA 9210	PLA 9210LS
Count [dtex]	550	1100	2200	1100
Filaments	108	210	210	210
Breaking tenacity [mN/tex]	390	370	340	350
Elongation at break [%]	25	38	40	43
TASE 5% [mN/tex]	120	96	92	110
HAS @ 130 °C, 2 min, 1 mN/tex [%]	9.0	9.1	9.2	1.9
Remark				Low shrinkage

Melting point PLA:	160 °C − 180 °C				
Colours yarns:	Standard white, green and yellow BIO-colours. More colours on request. (BIO-colours are made from environmentally friendly components)				
	White Green Yellow Brown				
	Red Blue Ocher yellow (Orange) Black				
Creep:	PLA is sensitive to creep (permanent deformation under the influence of mechanical stress dependent on temperature, time and load).				
	Senbis also offers PLA twines with improved creep properties.				
Heat resistance:	Tenacity vs temperature curve available on request.				







Senbis Sustainable Products

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