Oat of the Box –

Biopolymers filled with oat hulls

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arweco

Since 2023, a brand of Holzmühle Westerkamp GmbH

Biopolymers with natural fibers such as oat hulls and wood flour

Reducing the carbon footprint and avoiding microplastics

Holzmühle Westerkamp

- Medium-sized company in Visbek, Oldenburg Münsterland region
- Wood grinding since 1955, supplemented by oat hulls grinding in 2019
- Production of wood flour, fibers, and granules
- Processing of by-products such as sawdust, wood chips, and grain hulls
- Regional procurement of raw materials (within a radius of approx. 200 km) to keep the carbon footprint low

westerkamp
MODERN MATERIAL MILLING

Qualitätsmanagement ISO 9001
www.dekra-siegel.de
DEKRA zertifiziert

Energy management systems

DIN EN 50001

IFU-CERT
Zertifiziertes Managementsystem
ISO 14001:2015

Product lines arweco

Otura®

- Renewable oat hulls
- Organically grown and therefore harmless
- Residual material from the food industry
- Fiber content up to 50 %
- Natural, light color: easy to dye

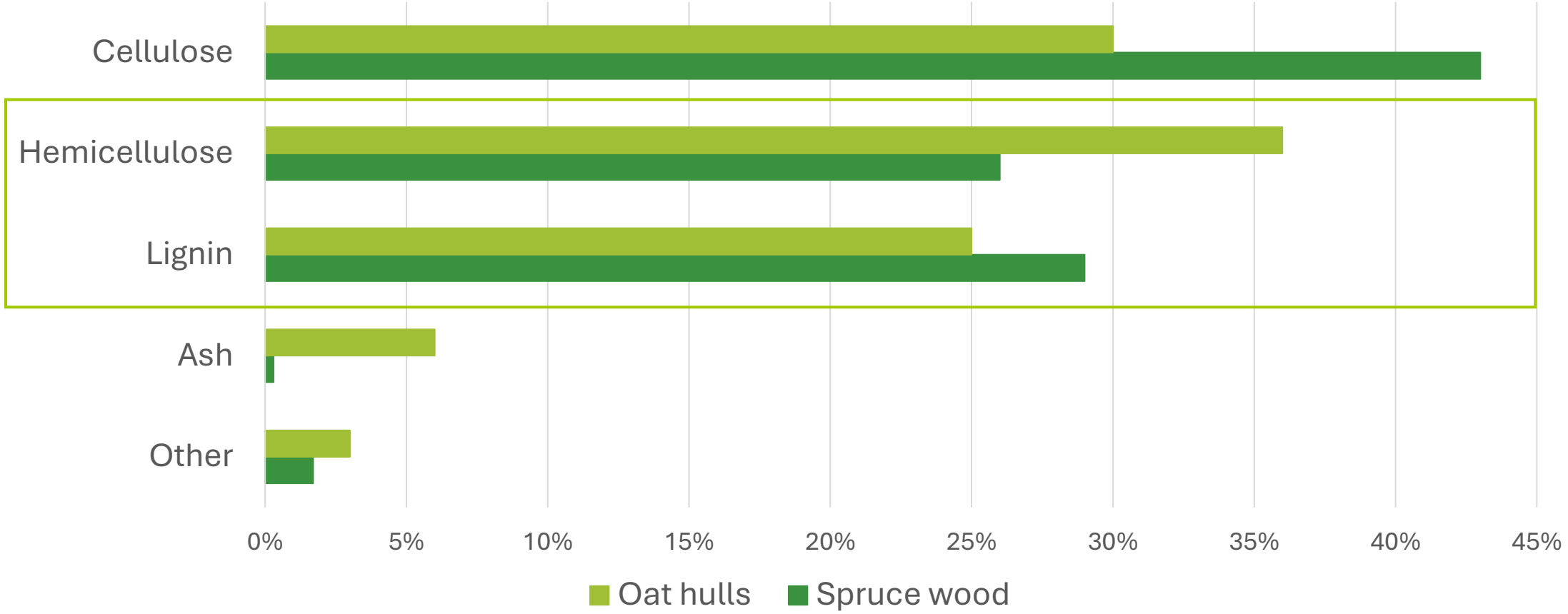
Lignura®

- Renewable wood fibers
- PEFC certified
- Mainly from sawmill industry waste
- Fiber content up to 40 %
- Natural, wood-like color

PEFC
PEFC/04-4-0007

- Less abrasive than glass or carbon fibers
- Biopolymers for recyclable and compostable applications
- Saves finite petrochemical resources and protects the environment

Why oat hulls?



Certifications according to TÜV Austria

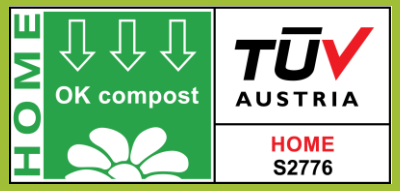
Certifications

soil biodegradability

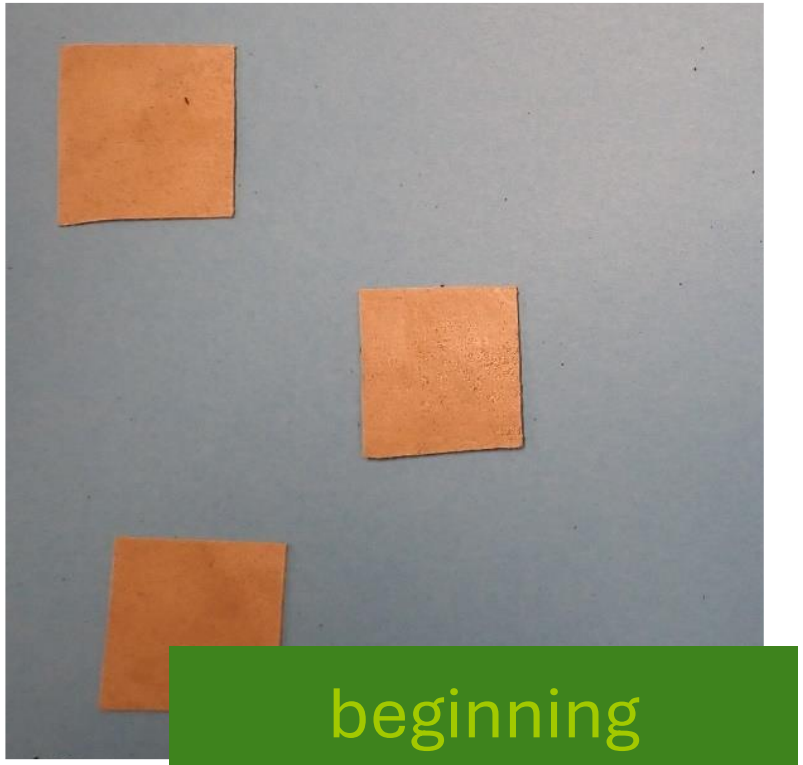
- Biodegradability of at least 90 % within a maximum of **2 years**
- Regulations on toxicity and chemical constituents
- No toxic damage to the soil may occur

home compost

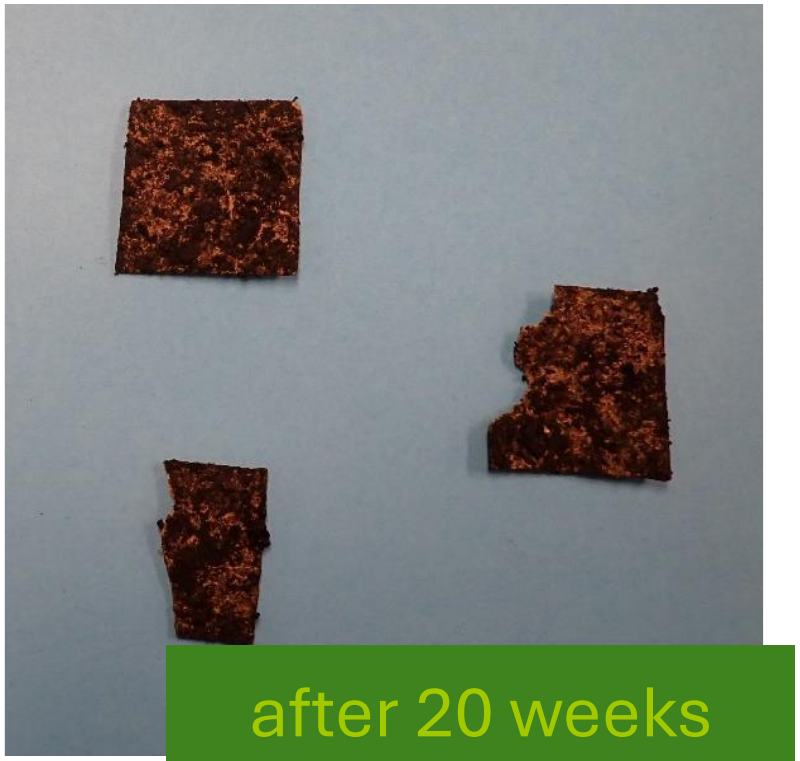
- Temperature: approx. 23 °C
- Biodegradability of at least 90 % after max. **12 months**
- Disintegration within **6 months**
- Testing for ecotoxicological effects and heavy metals



Slow biodegradation



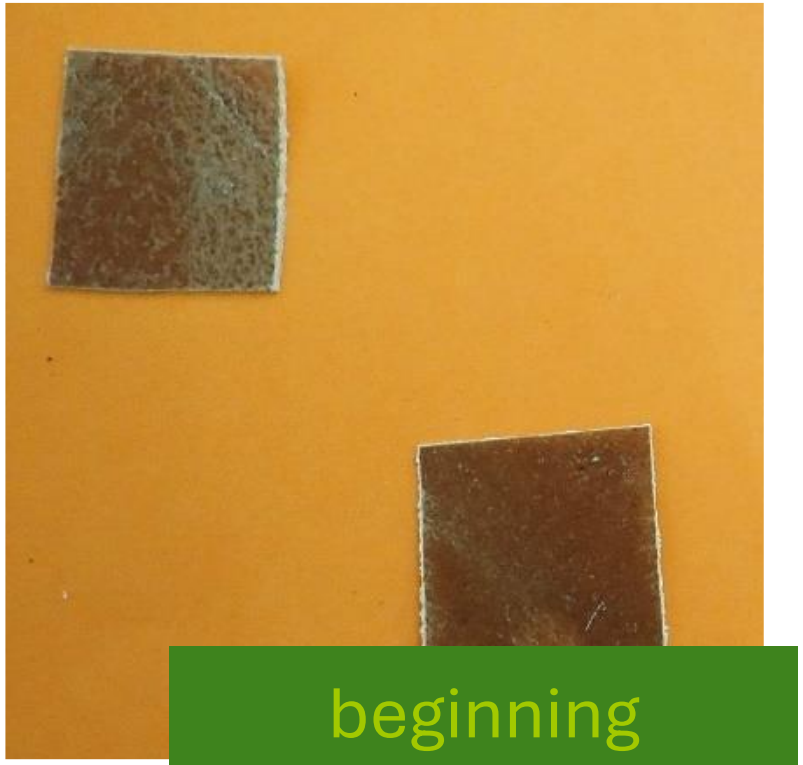
beginning



after 20 weeks

Thickness: 0.58 mm | Temperature: Room temperature | Tested according to: OK compost HOME

Fast biodegradation

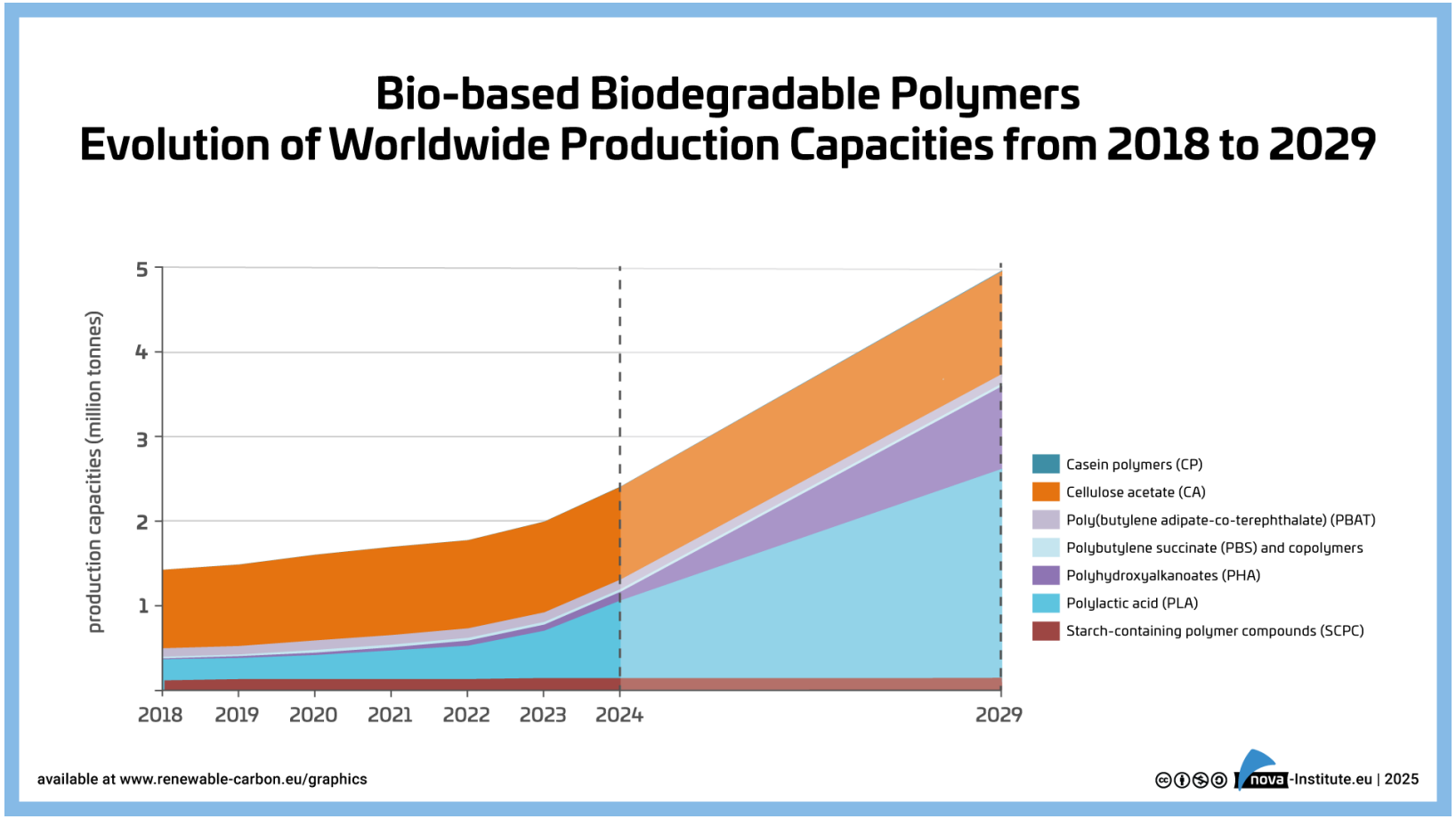


beginning

after 2 weeks

Thickness: 0.4 mm | Temperature: Room temperature | Tested according to: OK compost HOME

Outlook for biopolymers



Applications

agriculture/forestry • garden • packaging • toy • office • leisure time

arweco
ADVANCED BIOBASED COMPOUNDS

Thank you very much for your attention!

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