CHEMURGY: COST-BENEFIT ANALYSIS OF THE USE OF AGRICULTURAL WASTE AS AN ADDITIVE FOR PLASTIC MATERIALS

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PARADIGMA PRODUTTIVO

IMPIEGO DI RIFIUTI AGRICOLI PER LA PRODUZIONE DI PLASTICHE

SIMBIOSI INDUSTRIALE TRA SETTORE PRIMARIO E SECONDARIO

Polimeri vegetali con biomasse

Resistente
Finitura superficiale
Colore naturale

BIO-BASED

Alabastro

Albicocca

Canapa

Carciofo

Etna

Fico d'India

Ginestra

Melograno

Sansa

Uovo

Carrubo

Arancia rossa

Grano

Arancia gialla

Vinacciolo

FILAMENTI

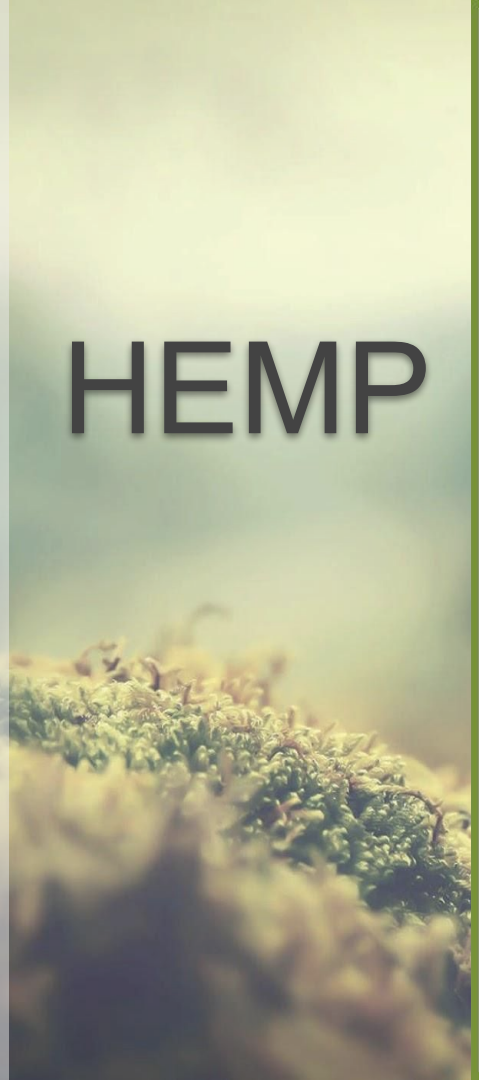
- INNOVAZIONE
- SOSTENIBILITÁ
- QUALITÁ

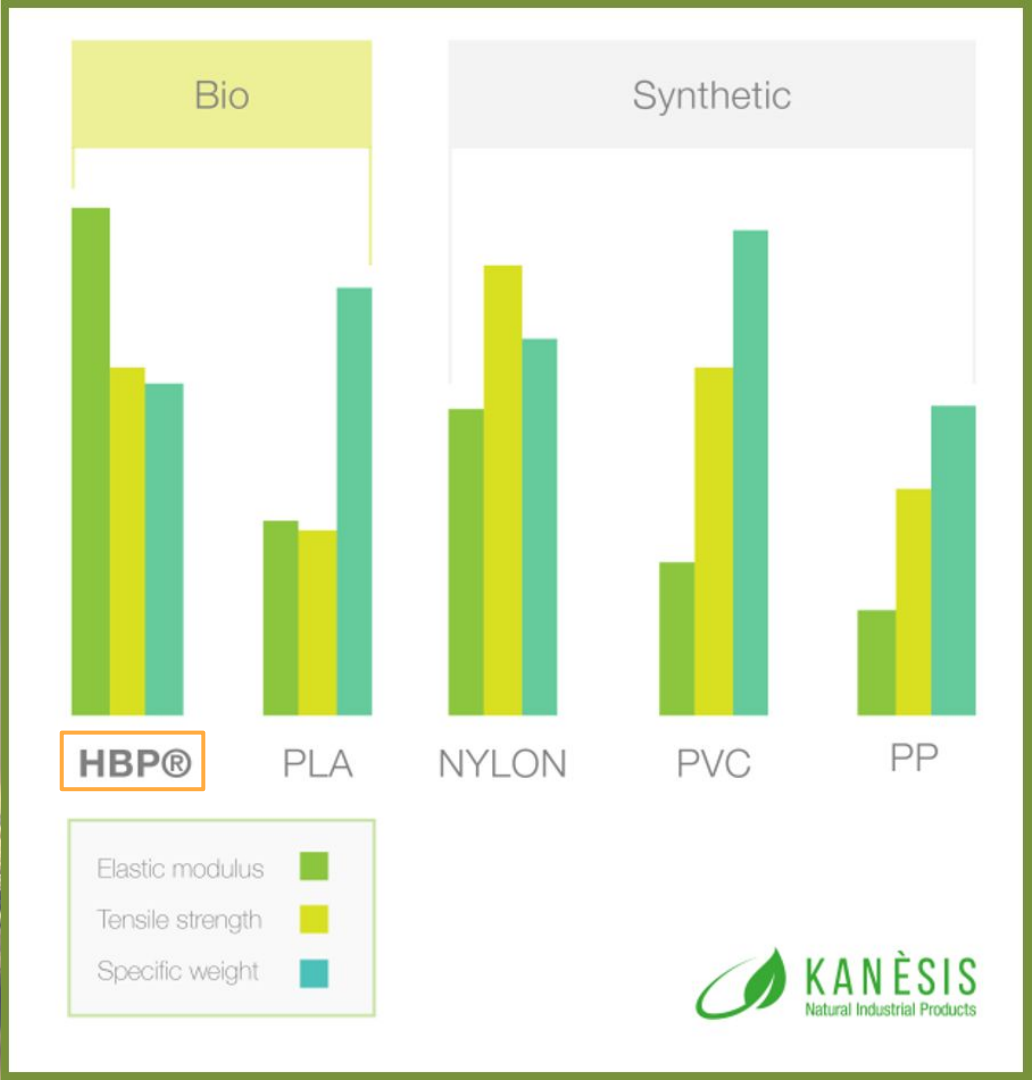
WEED

HEMP

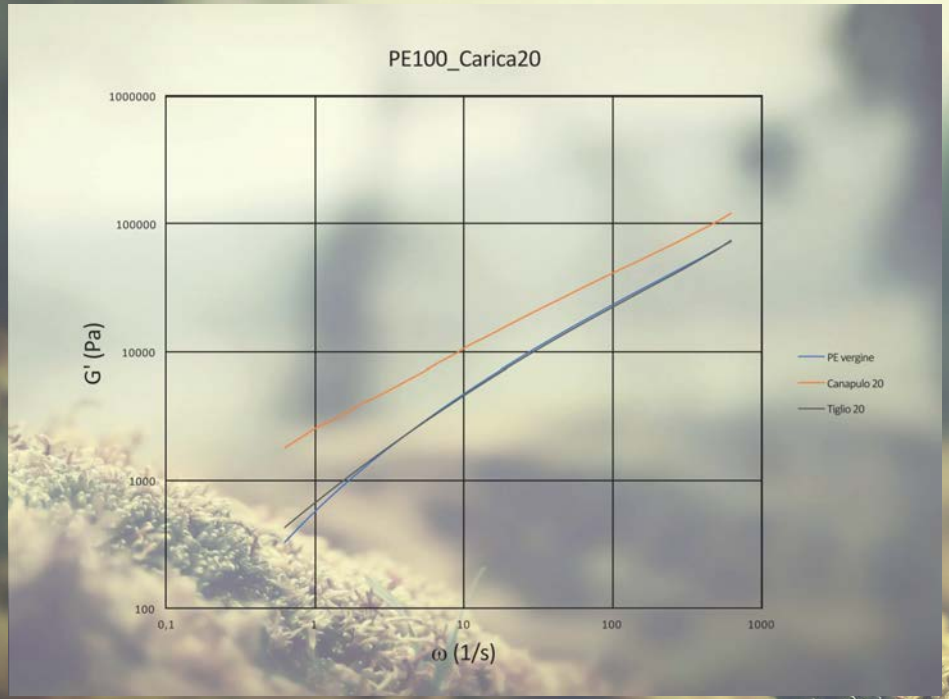
TOMATO

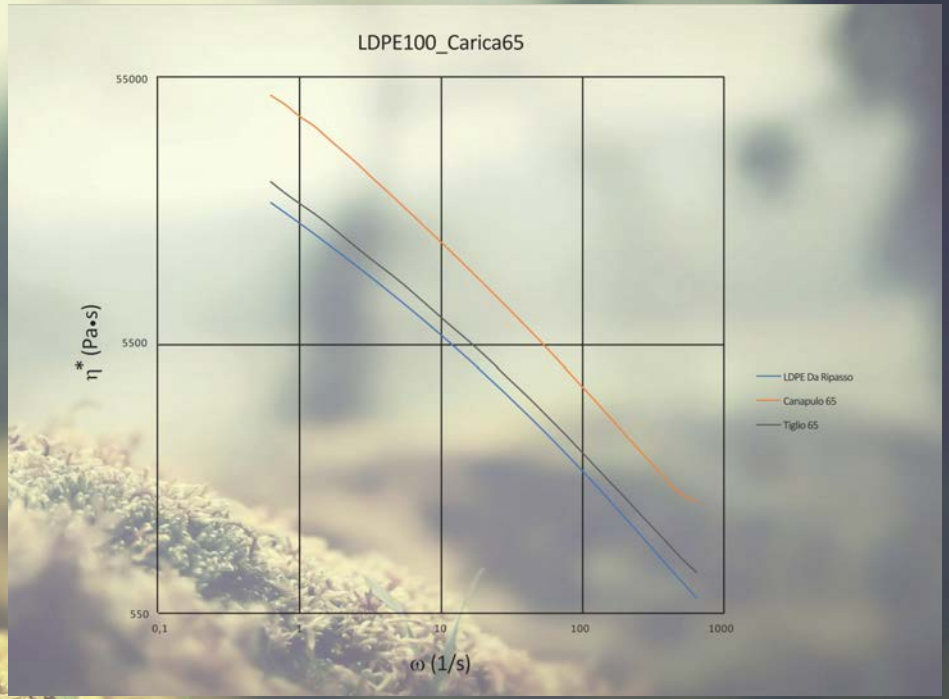
HEMP

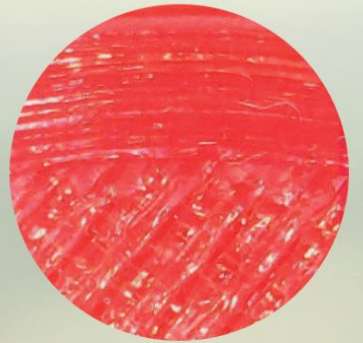



Bio
Synthetic
HBP®
PLA
NYLON
PVC
PP
Elastic modulus
Tensile strength
Specific weight
KANÈSIS
Natural Industrial Products

Material	Young	Sforzo/Rott.	Bio	Peso Spec.
HBP®	3,2 GPa	35 MPa	SI	0,96
PLA	1,9 GPa	28 MPa	SI	1,24
NYLON	3,0 GPa	70 MPa	NO	1,1
PVC	1,5 GPa	53 MPa	NO	1,4
PP	1,1 GPa	35 MPa	NO	0,89

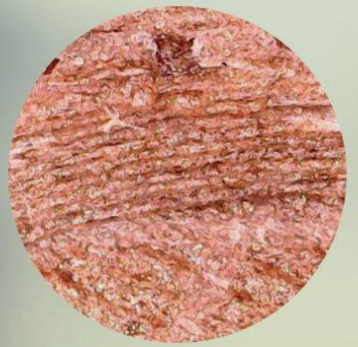

PE100_Carica20
1000000
100000
10000
1000
100
G' (Pa)
0,1
1
10
100
1000
ω (1/s)
PE vergine
Canapulo 20
Tiglio 20


LDPE100_Carica65
55000
5500
550
η* (Pa•s)
0,1
1
10
100
1000
ω (1/s)
LDPE Da Ripasso
Canapulo 65
Tiglio 65



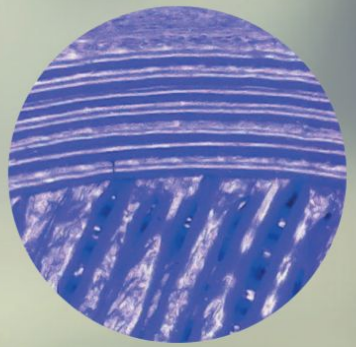
Detail of 3D print in PLA

Normal fusion between
the different layers



Detail of 3D print in HBP®

Higher quality fusion between
the different layers



Detail of 3D print in ABS

Normal fusion between
the different layers

I VANTAGGI PER IL SETTORE TERMOPLASTICO

MINORI COSTI DI PRODUZIONE

CARATTERISTICHE FISICHE MAGGIORATE

IDENTITA’

BIO-BASED

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https://www.kanesis.it/