



### ESTABIO M01 - M04

#### Compostable compound for mulching film

Fi-Plast S.r.l. thanks to decades of experience in the production of biodegradable compounds has developed the new series of ESTABIO M materials, dedicated to the production of bio-compostable film for mulching.



Mulching sheets produced with ESTABIO degrade completely without residues in the soil, even after several crop cycles, they can be applied with the traditional existing spreading or transplanting machines without the need for technological modifications.

ESTABIO allows the production of sheets that, thanks to the biodegradability, can be used for ALL types of crops, even those for which the mechanization of the crop prevented the use of sheets in polyethylene, as tomato or potato.



ESTABIO M01 and ESTABIO M04 are technologically advanced products that allow to obtain particularly thin mulching films (there is no need to remove them at the end of the harvest) with performance and durability comparable to traditional polyethylene films and lower costs.

### ESTABIO M01

Medium physical and mechanical properties				
	Unit	Standard	Value	Note
<b>Thermal properties</b>				
Melting point	°C	ASTM D3418	125-150	Pellets
<b>Rheological properties</b>				
Melt flow rate MFR	g/10 min	ASTM D1238	< 3	Pellets @ 190°C; 2,16 Kg
<b>Mechanical properties</b>				
Tensile strenght at break	MPa	ASTM D882	30	Film thickness: 20 microns measured in MD
"	MPa	ASTM D882	33	Film thickness: 20 microns measured in TD
Tensile elongation at break	%	ASTM D882	470	Film thickness: 20 microns measured in MD
"	%	ASTM D882	500	Film thickness: 20 microns measured in TD
Density	g/cm <sup>3</sup>	ASTM D792	1,38	Plate

### ESTABIO M04

Medium physical and mechanical properties				
	Unit	Standard	Value	Note
<b>Thermal properties</b>				
Melting point	°C	ASTM D3418	125-150	Pellets
<b>Rheological properties</b>				
Melt flow rate MFR	g/10 min	ASTM D1238	< 3	Pellets @ 190°C; 2,16 Kg
<b>Mechanical properties</b>				
Tensile strenght at break	MPa	ASTM D882	33	Film thickness: 20 microns measured in MD
"	MPa	ASTM D882	35	Film thickness: 20 microns measured in TD
Tensile elongation at break	%	ASTM D882	490	Film thickness: 20 microns measured in MD
"	%	ASTM D882	520	Film thickness: 20 microns measured in TD
Density	g/cm <sup>3</sup>	ASTM D792	1,34-1.35	Plate