



TECHNICAL DATA SHEET

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SEA®212 COMPOUND

The SEA®212 grade is **100% biodegradable in industrial compost** and more than **70 % biobased**. It has been developed for the **extrusion process**, including extrusion spinning and mesh extrusion.



Storage information

Storage and drying conditions of the SEA®212 compound to achieve optimal processing conditions (i.e. humidity level below 700 ppm) and ensure good properties :

- Keep the compound granules in its closed bag, in a room without humidity, at room temperature and without sources of heat, light or air.
- Keep the bag closed** until processing of the compound and close it again quickly after use if it is not completely empty to avoid any contamination.
- If possible, **dry the compound at 60°C** during 6 to 8 hours (standard) before processing. After drying, the granules can reach 680 ppm of moisture in 1 hour.
- After processing, it is not recommended to heat the material over 80°C.

Property	Standard	SEA® 212
Density (g/cm ³)	ISO 1183	1,20 – 1,24
Melting temperature (°C)	ISO 3146	115
Application temperature (°C)	/	< 80
MFI (150°C, 2.16 kg) (g/10min)	ISO 1133	2,2 – 2,3
MFI (170°C, 2.16 kg) (g/10min)	ISO 1133	3 – 8
MFI (170°C, 5 kg) (g/10min)	ISO 1133	13
MFI (170°C, 10 kg) (g/10min)	ISO 1133	30
Tensile modulus (GPa)	ISO 527	0,41 – 0,42
Ultimate strength (UTS) (MPa)	ISO 527	24 – 26
Elongation at UTS(%)	ISO 527	30
Strength at break (MPa)	ISO 527	32
Elongation at break (%)	ISO 527	410 – 415

Implementation process

Cleaning of the processing tool may be necessary to avoid any contamination. The presence of impurities can cause industrial tests to fail.

- Avoid a long period of stagnation of the material during processing to protect it from thermal degradation which could lead to a reduction in the properties and production

instabilities. It is highly recommended to have a material temperature in the extruder around 170°C.

Process temperature (indicative)	
Drying conditions	60 °C during 6 to 8 hours
Feeding	60 °C
Zones 5 to 1	130 – 170 °C