SEABIRD
7 rue du cmdt Charcot
56260 LARMOR PLAGE
France
contact@seabird.fr
+33(0)2 30 91 98 30

TECHNICAL DATA SHEET

SEA®253 COMPOUND

The **SEA®253** grade is **100% biodegradable in industrial compost** and more than **80% bio-based**. It has been developed for the **extrusion process**, and more specifically for mesh extrusion.

Property	Standard	SEA® 253
Density *(g/cm³)*	ISO 1183	**1,33**
Melting temperature *(°C)*	ISO 3146	**120**
Application temperature *(°C)*	/	**< 60**
MFI (170°C, 2.16 kg) *(g/10min)*	ISO 1133	**3 – 8**
Tensile modulus *(GPa)*	ISO 527	**0,35 – 1,00**
Ultimate strength (UTS) *(MPa)*	ISO 527	**3,24**
Elongation at UTS*(%)*	ISO 527	**50**
Strength at break *(MPa)*	ISO 527	**4**
Elongation at break *(%)*	ISO 527	**18**

Storage information

Storage and drying conditions of the **SEA®253** 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 or 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 60°C.

Process temperature (indicative)	
Drying conditions	60 °C for 6 hours
Feeding	60 °C
Zones 5 to 1	140 / 135 / 135 / 130 / 130

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 140°C. If needed, gradually increase it to a temperature deemed optimal for use.