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

TECHNICAL DATA SHEET

SEA®113 COMPOUND

The **SEA®113** grade is **100% biodegradable in industrial compost** and **more than 80% biobased**. It has been developed for the **injection molding process**.

Property	Standard	SEA® 113
Density *(g/cm³)*	ISO 1183	**1,35**
Melting temperature *(°C)*	ISO 3146	**120**
Application temperature *(°C)*	/	**< 90**
MFI (170°C, 2.16 kg) *(g/10min)*	ISO 1133	**8**
Tensile modulus *(GPa)*	ISO 527	**1,3 – 1,6**
Ultimate strength (UTS) *(MPa)*	ISO 527	**34 – 36**
Elongation at UTS*(%)*	ISO 527	**15 – 18**
Impact Charpy *(kJ/m²)*	ISO 527	**70 – 78**

Storage information

Storage and drying conditions of the **SEA®113** 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 80°C.

Process temperature (indicative)	
Drying conditions	60 °C for 6 hours
Feeding	60 °C
Zones 5 to 1	180 / 170 / 170 / 170 / 165

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