Technical Data Sheet



AGC-PE598

v.240821

Improve Tec AB

Org.Nr: 559109-2423

VAT.Nr: SE559109-242301

Technical Data Sheet	PLA compound for extrusion	AGC-PE598
Description of properties	AGC-EXFR598 is a thermoplastic compound based on Polylactic Acid	
	(PLA) for profile extrusion application	s. The material is
	characterised by its high impact resis	tance, stiffness, and flame-
	retardant properties.	

General properties	Method	Unit	Value
Density	ISO 1183	kg/dm³	1.38
MFI (190 °C; 2.16 kg)	ISO 1133	g/10min	2.7

Thermal properties	Method	Unit	Value
Melt temperature	Internal	°C	175
Ball pressure test (annealed 168h 105°C)	IEC 60695-10-2	°C	102
Ball pressure test (annealed 168h 60°C)	IEC 60695-10-2	°C	85
Cable support test (650 g/ 250mm, annealed 168h, 105°C)	IEC 61084-2-1	°C	>60

Flammability properties	Method	Unit	Value
Glow wire test	IEC 60695-2-10	°C	750
Spread of fire	Imitates IEC 61084-1, 13.1.3	-	Self- extinguishing<30s

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Processing recommendations

- Storage and drying conditions are important for successful processing of the material.
- Single screw extruders with low compression are recommended. If an irregular melt flow is achieved a melt pump is recommended. Starve-feeding can be necessary to reduce heat of friction in the cylinder.
- Following temperature profile is recommended for the extruder:

Zone	Temperature (°C)
Zone 1	170
Zone 2	170
Zone 3	175
Zone 4	175
Zone 5	180
Zone 6	180
Flange	180
Die	180

Drying of pellets

- It is very important to dry the pellets prior to extrusion. Moisture causes hydrolysis of the polymer during melt processing resulting in deviations in processing performance and reduced mechanical performance of the finished part.
- Drying at 85 °C in a dry-air dryer. Measure the moisture content after drying to verify sufficiently low moisture content.
- The moisture content shall not exceed 0,05% after drying.

Storage of pellets

- Avoid direct contact with air and light.
- It is recommended to keep the packaging sealed until the material is to be used and to reseal the packaging after usage to avoid moisture uptake.

Recommended

- It is recommended to measure the actual melt temperature with a hand-held device before starting production to check if heat of friction occurs.
- Long time stagnation of the material in the cylinder shall be avoided as this can cause degradation. Purging of the cylinder can be made with a low flow PE-HD.

OBS

- The information submitted in this document is based on our current knowledge and experience.
- In view of the many factors that may affect processing and application, these data do not relieve processors of the responsibility of carrying out their own tests and experiments.