



Provisional Technical Data Sheet

STYRENICS

Edistir® SR550 Balance BA90

HIPS
HIPS bio-attributed



SUSTAINABILITY

Bio raw materials can be used in production processes together with traditional ones. To attribute the characteristics of sustainability to the final product, Versalis applies the **Mass Balance** approach, an acknowledged chain of custody that ensures the allocation of sustainability characteristics of raw materials, to final products in a regulated and verifiable manner.

Balance® BA products are provided with a **sustainability declaration** indicating the amount of Bio Attributed component. They guarantee identical performance, quality and properties, as they do not differ in chemical composition and physical-mechanical performance from standard products.

The production of Edistir® SR550 Balance BA90 contributes to the circular economy model since the bionafta comes from biological feedstock (eg. vegetable oils).

Balance® BA90 products have 90% of bio-attributed share.

PROPERTIES

General	Test Conditions	Test Method	Unit	Value
Water Absorption	24 h - 23°C	ISO 62	%	< 0,1
Density	-	ISO 1183	g/cm ³	1,04
Bulk density	-	ISO 60	g/cm ³	0,65
Rheological				
Melt Flow Index	200 °C - 5 kg	ISO 1133	g/10'	11
Mechanical				
Tensile stress at yield	50 mm / min	ISO 527	MPa	20
Tensile stress at break	50 mm / min	ISO 527	MPa	19
Tensile strain at break	50 mm / min	ISO 527	%	55
Rockwell Hardness	L/M Scale	ISO 2039/2	-	L 60
Tensile Modulus	1 mm / min	ISO 527	MPa	1800
Flexural strenght	2 mm/min	ISO 178	MPa	32
Izod Impact Strenght, notched	+ 23 °C - 4 mm	ISO 180/1A	kJ/m ²	9
Izod Impact Strenght, notched	- 30 °C - 4 mm	ISO 180/1A	kJ/m ²	6,5
Thermal				
Coefficient of Linear Thermal Expansion	-	ASTM D 696	10 ⁻⁵ / °C	9
Thermal Conductivity	-	ISO 8302	W/(K · m)	0,17
Moulding Shrinkage	-	ISO 294/4	%	0,4 ÷ 0,7
Vicat Softening Temperature	10 N - 50 °C/h	ISO 306/A	°C	90
Vicat Softening Temperature	50 N - 50 °C/h	ISO 306/B	°C	82
Deflection temperature under load (annealed)	1,82 MPa - 120°C/h	ISO 75-2/A	°C	81
Flammability				
Flame Behaviour	1,5 mm	UL 94*	cl.	HB
Glow Wire Test (GWT)	3 mm	IEC 60695-2-10	°C	650

*internal test

**EDISTIR® HIPS** bio-attributed**SR 550 Balance BA90**

APPLICATIONS

Edistir® SR 550 Balance BA90 is suitable for:

- Toys
- Housewares
- Technical items

PROCESSABILITY

Injection Moulding:

- Predrying normally not required
- Melt Temperature 200 -250°C
- Mould Temperature 20 - 60°C

STORAGE

- 🔥 Store away from atmospheric agents and direct sunlight, away from sources of heat and light.
- 🕒 The product, if stored correctly, keeps its characteristics for at least fifteen months.

AVAILABILITY

To find out about the availability of the resin and for information on specific applications, please contact the nearest Versalis sales office.

FOOD DECLARATION

Edistir® SR 550 Balance BA90 as supplied in the original packaging, by composition is compliant to some existing regulations on plastic materials intended for food contact.

TECHNICAL MANAGEMENT STYRENICS AND CLIENT RELATIONSHIP

For further information, please contact Versalis directly writing to info.styrenics@versalis.eni.com.

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PLEASE NOTE: please consult the relevant safety data sheet for more detailed information. The information and data contained in this document are indications that do not constitute a guarantee if the buyer does not fulfill the obligations and requirements of the case. Versalis is available for any suggestions and further information.

DISCLAIMER: it is the responsibility of the end user to verify the safety, regulatory compliance and technical suitability of the product for the specific application.

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