INZEA BIOPOLYMERS

F38

TECHNICAL DATA SHEET

ISSUED DATE: APRIL 2021

ISO 9001

CHARACTERISTICS

INZEA F38 is a thermoplastic material, registered by Vinçotte as compostable, within a maximum thickness according to EN 13432. The renewable content is 70%. For further information, please contact NUREL. INZEA F38 is suitable for injection moulding applications. It can be processed in conventional equipment for polyolefins, PS and PA6.

PROPERTIES

PHYSICAL PROPERTIES	CONDITIONS	TEST METHOD	UNIT	INZEA F38
% Biobased content			%	70
Melt Volume Rate	190ºC 2,16 Kg	ISO 1133	cc/10min	20
Density	23ºc, 50% HR	UNE-EN ISO 1183-1	g/cm³	1.23
Moisture content		NAPPA-032	%	< 0.5
Melting Temperature (DSC)	10ºC/min	ISO 3146	ºC	175-180
Moulding Shrinkage	longitudinal transversal	UNE-EN ISO 294-4	%	0.35 0.28
MECHANICAL PROPERTIES				
Heat Deflection Temperature (HDT)	0,45 Mpa	ISO 75-1/-2	ºC	60
Charpy notched impact strength	23ºC	ISO 179/1eA	kJ/m²	7.5
Charpy notched impact strength	-30ºC	ISO 179/1eA	kJ/m²	6.2
Tensile modulus	23ºC, 1 mm/min	ISO 527-1/-2	MPa	2050
Tensile strength	23ºC, 50 mm/min	ISO 527-1/-2	MPa	40
Elongation at yield	23ºC, 50 mm/min	ISO 527-1/-2	%	2.5
Elongation at break	23ºC, 50 mm/min	ISO 527-1/-2	%	12
Flexural modulus	23ºC, 2 mm/min	ISO 178	MPa	2400
Flexural strength	23ºC, 2 mm/min	ISO 178	MPa	64

Nurel S.A.
Ctra. Barcelona km 329
50016 Zaragoza. Spain
T +34 976 465 579
F +34 976 574 108
www.nurel.com

APPLICATIONS

INZEA F38 can replace HDPE, PP, PS and PA6 in several injection applications. It is specially recommended when high tensile strength is required.

FORMAT AND STORAGE

INZEA F38 is supplied in moisture-proof packaging. Typical formats are aluminium thermosealed Big Bags, Octabins and 25kg bags. All containers are perfectly sealed. The product should be stored in a dry place and opened just before processing.

PROCESSING GUIDELINES

Drying

Material is supplied pre-dried and ready to process, nevertheless we recommend pre-drying the material before processing in a dry-air dryer at 50ºC during 4 hours. Bags and containers should be stored in a dry place at room temperature. Storage time should not exceed six months. Drying temperatures of above 50ºC should be avoided because of agglomerate problems.

Injection Moulding

INJECTION MOULDING CONDITIONS:

Melt temperature: 190 ºC Mold temperature: Cold

Masterbatches used must be compostable and used following EN 13432. For further information regarding the use of masterbatches and suitable masterbatches in the market, please contact NUREL.

Scraps of INZEA F38 can be added to the same grade of INZEA F38 raw material at a percentage below 10% without a significant loss of properties. Scraps have to be stored in aluminium thermosealed packaging and storage time should not exceed six months. If it is required scraps can be dried at 50ºC.

Note: All recommendations are based on knowledge and experience. The values have been established on standard tests. The figures should be regarded as guide values and not as binding minimum values. As many factors may affect processing or applications, we recommend that you make tests to determine

Nurel S.A.
Ctra. Barcelona km 329
50016 Zaragoza. Spain
T +34 976 465 579
F +34 976 574 108
www.nurel.com