

MATERIAL COMPARISON

15.11.2022

Version: 1.7

Table 1: Technical Properties

	SULAPAC MATERIAL								
	Premium	Premium Flex 40	Universal	Universal Flex 30		Universal Flex 35	Solid	Barrier	Flow
				High Flow	Low Flow				
Technology (Injection Molding / Extrusion)	IM	IM	IM	IM		IM	IM	IM	EX
MFI (190°C/2.16 kg)	N.A	N.A	15 g/10 min	12 g/10 min	2 g/10 min	7-6 g/10min	3-6 g/10 min	12 g/10 min	1 g/10 min
Flexural Strain (%)	2.0	2.2	1.5	2.6	3.0	2.6	1.3	1.14	-
Tensile modulus (GPa)	5.5	4.3	5.0	3.0	2.8	3.5	7 - 8	7	2.3
Tensile strain at break (%)	1.2	1.4	1.5	2.9	3.3	2.7	1.2	1.3	9
HDT-B (Heat deflection temperature)	56°C	56°C	55°C	54°C		54°C	130°C	-	54°C
Charpy impact strength (kJ/m ²)	6-7	8	7-9	12	16	14	19	8.7	-
Material Density (g/cm ³)	1.27	1.27	1.27	1.27		1.27	1.38	1.49	0.72
Shrinkage (%)			0.1...0.2	0.3...0.4		0.3	<0.5	1.0	
Mold Temperature	20 - 40°C	20 - 40°C	20 - 40°C	20 - 40°C		20 - 40°C	>100°C	60 - 70°C	-
Wood chip size	Large	Large	Small	Small		Small	None	None	Fine
Object thickness recommendation, min.	2mm	2mm	0.6 – 1mm	0.6 – 1mm		0.6mm	0.5mm	0.5mm	0.3mm

Table 2: Material Features

		SULAPAC MATERIAL								
		Premium	Premium Flex 40	Universal	Universal Flex 30		Universal Flex 35	Solid	Barrier	Flow v1.7
					High Flow	Low Flow				
KEY CLAIMS	No permanent Microplastics	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Safe for People and planet	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Sustainably sourced	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Mass producible	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Industrially compostable	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Bio-based %	100%	87%	100%	79%	78%	94%	100%	98%	72%

Table 3: Material Certificates

		SULAPAC MATERIAL								
		Premium	Premium Flex 40	Universal	Universal Flex 30		Universal Flex 35	Solid	Barrier	Flow v1.7
					High Flow	Low Flow				
INDUSTRIAL COMPOSTABILITY	SEEDLING EN13432 / ASTM D6400				✓ EN13432 ASTM D6400	✓ EN13432 ASTM D6400				
	BPI ASTM D6400	✓	✓	✓	✓		✓	✓	✓	✓
BIOBASED %	BIO PREFERRED ASTM D6866	100%	87%	100%	79%	78%	94%	100%	98%	72%
WOOD	FSC Mix INS-COC-100087	✓	✓							

Table 4: Suitability for Applications

	SULAPAC MATERIAL								
	Premium	Premium Flex 40	Universal	Universal Flex 30		Universal Flex 35	Solid	Barrier	Flow
				High Flow	Low Flow				
Cosmetics packaging	X	X	X			X		X	
Color cosmetics			X						X
Supplement packaging	X		X			X		X	
Luxury packaging	X	X	X			X			
Kitchenware							X		
Straw									X
Cutlery			X	X					
Object thickness recommendation, min	2mm	2mm	0,6 - 1mm	0,6 – 1mm		0,6mm	0,5mm	0,5mm	0,3mm