

# Technical Data Sheet

## FluidSolids® Biocomposite FoodGrade 8A

FluidSolids® Biocomposite FoodGrade 8A is the “food-contact compliant grade” biocomposite developed in Switzerland by FluidSolids®. Produced from organic side-streams and fully home-compostable, it is an environmentally friendly and cost-effective raw material, suitable for direct and indirect food-contact applications.

Technical Data †	Test Method	Unit	Value
<b>Physical Properties</b>			
Color	-	-	Black, Natural
Shrinkage (Specimen*)	FS-intern	%	0.6
Mass Density (Specimen*)	DIN 53479	g/cm <sup>3</sup>	1.4
Bulk Density (Pellets)	DIN ISO 697	g/cm <sup>3</sup>	0.6
UV Resistance	ASTM D4674	-	very good
<b>Mechanical Properties*</b>			
Elastic Modulus	DIN- EN ISO 527-1	N/mm <sup>2</sup>	6300 ± 200
Flexural Modulus	EN ISO 178, Verfahren A	N/mm <sup>2</sup>	6900 ± 200
Max tensile stress	ISO 527-1	N/mm <sup>2</sup>	44.9 ± 0.9
Elongation at break in tension	ISO 527-1	%	0.7 ± 0.1
Impact strength	DIN EN ISO 179-1 Charpy	KJ/m <sup>2</sup>	4.8 ± 0.5
<b>Thermal Properties</b>			
Heat deflection temperature (HDT)	DIN EN ISO 75-2	°C	63.3 ± 0.2
<b>Microbiology</b>			
Number of yeasts at 25°C	ISO 7954:1999	CFU/surface	<1,0x10 <sup>1</sup> ; very good
Number of moulds at 25°C	ISO 7954:1999	CFU/surface	<1,0x10 <sup>1</sup> ; very good
Aerobic colony count at 30°C	EN ISO 4833-1:2013-12	CFU/surface	<1,0x10 <sup>1</sup> ; very good

† Data measured for representative black formulation. Natural formulation features comparable values.

\* measured on specimen produced according to DIN EN ISO 3167 and equilibrated in ventilated oven, 24h at 38°C.

## Storage Recommendations

FluidSolids® Biocomposite FoodGrade 8A pellets must be stored in the original sealed aluminum bags at a temperature between -10 °C and 40 °C for a maximum of 12 months. Bags open for processing need to be resealed if not completely used.

## Processing

FluidSolids® Biocomposite FoodGrade 8A is produced in pellet form and is processable in conventional injection molding machine. FluidSolids® Biocomposite FoodGrade 8A is processed only by certified manufacturing partners. For further information please contact FluidSolids® technical support.



Typical FluidSolids® Biocomposite FoodGrade 8A pellets

## DISCLAIMER

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication.

However, this statement is limited to FluidSolids® Biocomposite FoodGrade 8A as it leaves production. It is the customer's responsibility to verify compliance with applicable end product requirements under actual and foreseeable conditions of use.

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