

Ingeo™ 2003D

Poly(lactic Acid)
NatureWorks® LLC

Message:

Ingeo biopolymer 2003D, a NatureWorks LLC product, is a thermoplastic resin derived from annually renewable resources and is specifically designed for use in fresh food packaging and food service ware applications. Ingeo biopolymer 2003D is a transparent general purpose extrusion grade that is used naturally or as part of a formulated blend. This is a high molecular weight biopolymer grade that processes easily on conventional extrusion equipment. Extruded roll stock is readily thermoformable.

Applications

Potential applications for Ingeo biopolymer 2003D include:

- Dairy containers
- Food service ware
- Transparent food containers
- Hinged-ware
- Cold drink cups

General Information			
Features	High molecular weight		
	Comstable		
	Updatable resources		
	Definition, high		
	Biodegradable		
	Compliance of Food Exposure		
Uses	Cup		
	Container		
	Food packaging		
	Food service sector		
	Food container		
	General		
Agency Ratings	ASTM D 6400		
	EN 13432		
	FDA Food Exposure, Not Rated		
	Europe 10/1/2011 12:00:00 AM		
Appearance	Clear/transparent		
Forms	Particle		
Processing Method	Extrusion		
	Thermoforming		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.24	g/cm ³	ASTM D792

Melt Mass-Flow Rate (MFR) (210°C/2.16 kg)	6.0	g/10 min	ASTM D1238
Films	Nominal Value	Unit	Test Method
Elastic Modulus - MD	3450	MPa	ASTM D882
Tensile Strength - MD			ASTM D882
Yield	60.0	MPa	ASTM D882
Fracture	53.1	MPa	ASTM D882
Tensile Elongation - MD (Break)	6.0	%	ASTM D882
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	16	J/m	ASTM D256
Optical	Nominal Value		
Clarity	Transparent		
Extrusion	Nominal Value	Unit	
Drying Temperature	90.6	°C	
Drying Time	2.0	hr	
Suggested Max Moisture	< 0.025	%	
Hopper Temperature	45.0	°C	
Cylinder Zone 1 Temp.	179	°C	
Cylinder Zone 2 Temp.	191	°C	
Cylinder Zone 3 Temp.	199	°C	
Adapter Temperature	199	°C	
Melt Temperature	210	°C	
Die Temperature	191	°C	
Extrusion instructions			
Screw Speed: 20-100 rpm			

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

