

TDS NO.: KB043000620 Version: 1.0

# **ECOPOND®** Compostable Polyesters D300 F20

## **Production Description**

FEATURES	APPLICATIONS
Totally biodegradable	Film making
Compostable	Mulching

#### **Typical Properties**

Properties <sup>[1]</sup>	Test Method	<b>Test Condition</b>	S.I. Units	Values <sup>[2]</sup>
Granules				
Melt Flow Rate	ISO 1133	190℃, 2.16 kg	g/10min	2.0-6.0
Specific Gravity	ISO 1183	23℃	g/cm³	1.3-1.5
Melt Point	DSC	-	${\mathbb C}$	110-130
Film			Thickness:	15 μm
Tensile strength (MD/TD)	ISO 527	500 mm/min	MPa	20/10
Elongation at Break (MD/TD)	ISO 527	500 mm/min	%	150/300
Tear Strength (MD/TD)	ISO 6383-2	400 g	mN	800/1500
Dart Drop	ISO 7765-1	25℃	g	130
Ttransmittance	ASTM D 1003	Monolayer	%	88
Haze	ASTM D 1003	Monolayer	%	80
Water vapor trausmission rate	ASTM E 96	40° C, 60RH%	g·m <sup>-2</sup> ·d <sup>-1</sup>	500 R

<sup>[1]</sup> Tested with freshly blowing film, not to be construe as specifications, measured by test specification and used for referential purpose only.

# **Quality Control**

The melt flow rate, MFR, at  $190\,^{\circ}$ C, 2.16 kg, according to ISO 1133 has been defined as specified parameter for quality control. A certificate can be provided with each lot number upon request. In order to obtain a high accuracy for the MFR measurement, the granules should be dried for 5 hours at  $80\,^{\circ}$ C.Other data given in our literature are typical values, which are not part of our product specification.

# Form Supplied and Storage

Temperatures during transportation and storage should not exceed  $70^{\circ}$ C at any time. Storage time is not suggested to be over 12 months under proper conditions in an unopened bag, the product should be used as soon as possible when the package is opened.

<sup>[2]</sup> The sample is of 15  $\mu$ m-thick in the BUR of 3.5 with natural color. The testing results might be different in other specification or in black film.



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Trade name	Net weight	
D300 F20E	25 kg/package	
D300 F20D	800 kg/ package	

# **Processing Conditions**

- Well packaged products can be used directly. If the package is damaged before use, the product should be dried prior to processing. Moisture levels above 1000 ppm may affect film-blowing operation;
- Effective drying takes place at 80°C for 5 hours.
- Processing parameters for blowing film:

Temperature zone		Set value [1]	Range
Melt Temperature		<b>160</b> ℃	<b>150-170</b> ℃
Barrel Zone Temperature	Rear	<b>160</b> ℃	<b>150-170</b> ℃
	Center	<b>165</b> ℃	<b>150-180</b> ℃
	Front	165℃	<b>150-180</b> ℃
Die Head Temperature		<b>160</b> ℃	<b>150-170</b> ℃
Processing Temperature Limit		180℃	

<sup>[1]</sup> The data sheet is just for reference. In actual process, the parameter should be adjusted.

### **Safety Advice**

Direct contact with the melting resin should be avoided during processing operations. The processing area should be well ventilated, as during processing the materials might emit fumes containing decomposing substances, which may be irritating. We recommend that clients should investigate the application demand of their products in advance to ensure proper use of this product, and feel free to contact with us for technical support when necessary.

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