

	<b>Product Data Sheet</b>	Issue Date : 01.01.10
<b>Product Name</b>	<b>Futura GreenWavePET 40 - Type 303</b>	<b>Old Type No. 990901P4</b>

### Recommended Applications

- ▶ Dual Ovenable Trays.
- ▶ Sheets and Thermoforming applications.

### Product Features

- ▶ Futura GreenWavePET 40 is a PET based resin manufactured using 40% PCRPET by chemical glycolysis.
- ▶ Futura GreenWavePET 40 has fast crystallizing characteristics both during heating and cooling cycles and contains special additive for imparting thermal stability to obtain a good balance of rigidity and dimensional stability which is crucial for meeting the cyclic temperature needs involved in deep freezing and microwave heating of food trays.
- ▶ Futura GreenWavePET 40 is manufactured under Futura's patented technology for chemical recycling employing polymer filtration below 70 micron to deliver properties as good as virgin.
- ▶ Futura GreenWavePET 40 resin is in full compliance with USFDA regulations and EU norms.

### Properties

Characteristic	Unit	Type 303			Test Method
		A	B	C	
Intrinsic Viscosity @ 30°C	dL/g	0.85 ± 0.02	0.95 ± 0.02	1.025 ± 0.025	FPL-QP-V-20-58
b* Color	CIE Lab	1.0 max.	2.0 max.	3.0 max.	FPL-QP-S-20-55-Part-B-XXI
Carboxyl Number	meq/kg	25 max.	25 max.	25 max.	FPL-QP-T-20-55-Part-B-VIII
Melting Point	°C	248 ± 3	248 ± 3	248 ± 3	FPL-QP-DSC-20-55-Part-B-XVIII #
Acetaldehyde	ppm	1.0 max.	1.0 max.	1.0 max.	FPL-QP-GC-20-55-Part-B-XII
Bulk Density	g/cc	0.85 ± 0.10	0.85 ± 0.10	0.85 ± 0.10	FPL-QP-P-20-55-Part-B-XX
Wt. of 20 Chips	mg	300 ± 50	300 ± 50	300 ± 50	FPL-QP-W-20-55-Part-A-I
Moisture (when packed)	wt. %	0.25 max.	0.25 max.	0.25 max.	FPL-QP-E-20-55-Part-B-VI

# Determined using DSC second heating cycle.

### Processing Parameters

#### a) Drying Condition

Granules must be thoroughly dried before processing to limit the occurrence of hydrolytic degradation.

Drying temperature	165 ± 5 °C
Drying time	4- 5 hours
Dew point	- 40 °C
Residual moisture content	≤ 25 ppm

#### b) Process Temperature\*\* (Extrusion)

Zone Temperature	280 ± 5 °C
Die Zone	280 ± 5 °C

\*\* The values quoted above are typical numbers for benchmarking. Individual machine parameters should be determined on a case-by-case depending on the design of the product(s).

### Packing

Resin can be supplied in 1000 kg PP jumbo bags with LDPE liner at 20 bags per 20 ft FCL container as required.

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