

	<b>Product Data Sheet</b>	Issue Date : 01.01.10
<b>Product Name</b>	<b>Futura ClearFastPET - Type 103</b>	<b>Old Type No. 940401C</b>

### Recommended Applications

- ▶ Aqua and Carbonated Soft Drink (CSD) Bottles.

### Product Features

- ▶ Futura ClearFastPET is a PET based copolymer resin containing IPA as a comonomer.
- ▶ Futura ClearFastPET is formulated with special additives that can deliver excellent clarity and rigidity.
- ▶ Futura ClearFastPET exhibits fast reheat characteristics required for high speed stretch blow molding machine. The resin does not leave behind any grayish tinge to the blown containers.
- ▶ Futura ClearFastPET is in full compliance with USFDA regulations, EU and HBB Canada norms.

### Properties

Characteristic	Unit	Type 103			Test Method
		A	B	C	
Intrinsic Viscosity @ 30°C	dL/g	0.76 ± 0.02	0.80 ± 0.02	0.84 ± 0.02	FPL-QP-V-20-58
b* Color	CIE Lab	-1 max.	-1 max.	-1 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	246 ± 2	246 ± 2	246 ± 2	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
Weight 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\*\* (Injection Stretch Blow Molding)

Barrel Temperature	285 ± 5 °C
Mold Temperature	285 ± 5 °C
Preform Temperature	110 ± 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.

### Contact Address

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