


|  |                                 |                            |
|--|---------------------------------|----------------------------|
|  | <b>Product Data Sheet</b>       | Issue Date : 01.01.10      |
| <b>Product Name</b>  | <b>Futura EcoPET – Type 402</b> | <b>Old Type No. 990920</b> |

### Recommended Applications

- ▶ High performance fibre and Sheet applications.

### Product Features

- ▶ Futura EcoPET is a homopolymer resin without Sb (Antimony), Mn (Manganese) and Zn (Zinc) catalysts.
- ▶ Futura EcoPET is a cleaner polymer with excellent filterability/processability due to lower residual catalyst content.
- ▶ Futura EcoPET provides high clarity, superior thermal stability and mechanical properties.
- ▶ Futura EcoPET is in full compliance with USFDA regulations and EU norms.

### Properties

| Characteristic             | Unit    | Type 402    | Test Method                     |
|----------------------------|---------|-------------|---------------------------------|
|                            |         | D16         |                                 |
| Intrinsic Viscosity @ 30°C | dL/g    | 1.05 ± 0.02 | FPL-QP-V-20-58                  |
| b* Color                   | CIE Lab | -1 ± 2      | FPL-QP-S-20-55-Part-B-XXI       |
| Carboxyl Number            | meq/kg  | 25 max.     | FPL-QP-T-20-55-Part-B-VIII      |
| Melting point              | °C      | 250 ± 2     | FPL-QP-DSC-20-55-Part-B-XVIII # |
| Acetaldehyde               | ppm     | 1 max.      | FPL-QP-GC-20-55-Part-B-XII      |
| Bulk Density               | g/cc    | 0.85 ± 0.10 | FPL-QP-P-20-55-Part-B-XX        |
| Weight of 20 Chips         | mg      | 300 ± 50    | FPL-QP-W-20-55-Part-A-I         |
| Moisture (when packed)     | wt. %   | 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 of air          | - 40 °C     |
| Residual moisture content | ≤ 25 ppm    |

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

|                  |            |
|------------------|------------|
| Zone Temperature | 280 ± 5 °C |
| Die Temperature  | 275 ± 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 900 kg PP jumbo bags with LDPE liner at 20 bags per 20 ft FCL container as required.

### Contact Address

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