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|  | Product Data Sheet | Issue Date : 01.01.10 |
| Product Name | Futura PBN – Type 405 | Old Type No. 3001 |

Recommended Applications

- ▶ Precision engineering thermoplastic parts in electrical and electronic equipments such as:
 - a. Connectors, Switches, etc.,
 - b. Automotive accessories like fuel contact parts (hoses, tanks, etc.,)

Product Features

- ▶ Futura PBN is the NDC (Dimethyl-2,6-Naphthalene Dicarboxylate) based crystalline thermoplastic polyester homopolymer with extremely superior barrier properties.
- ▶ Futura PBN resin is formulated with a combination of special catalysts and additives that provide enhanced thermal resistance and extended life in engineering application.
- ▶ Futura PBN has been positioned in the segment where better mechanical properties, thermal resistance, chemical resistance and extended life in engineering application are of prime importance.

Properties

| Characteristic | Unit | Type 405 | | Test Method |
|----------------------------|---------|-------------|-------------|---------------------------------|
| | | D7 | D12 | |
| Intrinsic Viscosity @ 30°C | dL/g | 0.60 ± 0.05 | 0.85 ± 0.05 | FPL-QP-V-20-58 |
| b* Color | CIE Lab | 1 Max. | 1 Max. | FPL-QP-S-20-55-Part-B-XXI |
| Melting Point | °C | 240 ± 5 | 240 ± 5 | FPL-QP-DSC-20-55-Part-B-XVIII # |
| Bulk Density | g/cc | 0.75 ± 0.10 | 0.75 ± 0.10 | FPL-QP-P-20-55-Part-B-XX |
| Weight of 20 Chips | mg | 300 ± 50 | 300 ± 50 | FPL-QP-W-20-55-Part-A-I |
| Moisture (when packed) | wt. % | 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.

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|---------------------------|------------|
| Drying temperature | 160 ± 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 | 260 ± 10°C |
| Mold Temperature | 260 ± 10 °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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