

## FORMOSA INDUSTRIES CORPORATION POLYESTER FIBER DIVISION

## VIETNAM STAPLE FIBER PLANT

## TAIRILIN Bottle Grade PET Resin

Type No: 3822, Lot 3SF26 Neutral tint

Tairilin 3822 is a copolymer resin with a nominal intrinsic viscosity of 0.82 dl/g.

This resin posseses excellent melting characteristic, optimized crystallization rate, large process window and stability during injection / stretch-blow molding.

Specifically, 3822 resin has the advantage of wide processing window during injection and stretch blow molding, this provides the lower generation of acetaldehyde and higher clarity in bottles. 3822 resin is suitable for applications of bottled water, cooking oil, soy sauce and alcoholic beverage applications or for the larger wide mouth bottles.

Tairilin 3822 resin is produced in a state of the art continuous polymerization technology and is combined with a strict quality monotoring system. The production facilities producing 3822 resin are approved by ISO9001 and ISO14001 and OHSAS 18001 systems. 3822 resin has been accepted by food and beverage companies as its outstanding quality for many years.

3822 resin conforms to FDA Regulation 177.1630 and European Directives, and is widely used for food and beverage packaging. 3822 resin is an environmental friendly product with the important advantage of being totally recyclable.

## Technical Data Sheet

| common Di  | ata Bricet |                        |                      |   | r                  |  |
|--|------------|------------------------|----------------------|---|--------------------|--|
| Items  |            | Units                  | Value                |   | Test Method        |  |
| Intrinsic Viscosity  |            | dL/g                   | $0.820 \pm 0.02$     |   | ASTM D4603         |  |
| Melting temperature  |            | °C                     | $246 \pm 3$          |   | ASTM D3418         |  |
| Ash Content  |            | %                      | ≤ 0.02               |   | Nan Ya Method      |  |
| Moisture   |            | %                      | ≤ 0.30               |   | Nan Ya Method      |  |
| Acetaldehyde   |            | ppm                    | ≤ 1.0                |   | Gas Chromatography |  |
| Carboxylic end group   |            | 10 <sup>-6</sup> equ/g | $30 \pm 10$          |   | Titration Method   |  |
| Bulk Density   |            | g/cm <sup>3</sup>      | $0.89 \pm 0.05$      |   | JIS K-5101         |  |
| Chip Size  |            | chips/2g               | 140 ± 5              |   | Weight scale       |  |
| Fines  |            | ppm                    | < 100                |   | Nan Ya Method      |  |
| Color  | L* Value   | -                      | 91.0± 2.0            |   | CIE L*a*b*         |  |
|  | b* Value   |                        | -0.4± 1.0            |   | CIE L*a*b*         |  |
| The following are provided as suggesting value for reference |            |                        |                      |   |                    |  |
| Drying Air<br>Condition Res                                  |            | Dew point              | $^{\circ}\mathbb{C}$ | -40   |                    |  |
|  |            | Air flow               | ft³/min              | 1 / per pound chip per hour                       |                    |  |
|  |            | Residence              | hr                   |   | 7~5                |  |
|  |            | Temperature            | °C 160~170           |   |                    |  |
| Moulding temperature   |            |                        | $^{\circ}\mathbb{C}$ | 275~290   |                    |  |
| Resin storage conditions                                     |            |                        | Store 1              | Store PET bag in dry and clean warehouse.         |                    |  |
| at converter   |            |                        |                      | Consume PET resin within 1 year from packed date. |                    |  |
|  |            |                        | •                    |   |                    |  |

The figures stated in this catalogue are for reference only, real datas are based on Certificate of Analysis.

(update on 2021/03/17)

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