## NAN YA PLASTICS CORPORATION TAIRILIN Bottle Grade PET Resin

## Type No: <u>7742</u>

Tairilin 7742 is a copolymer resin with a nominal intrinsic viscosity of 0.74dl/g. This resin does not contain the conventional antimony and cobalt heavy metals. Such bottles made from 7742 resin have high brightness and clarity in compared with antimony based bottles. The reduced crystallization rate of 7742 resin allows lower processing temperature in the extruder which could inhibit the generation of acetaldehyde.

Tairilin 7742 resin is produced in a state of the art continuous polymerization technology and is combined with a strict quality monitoring system. The production facilities producing 7742 resin are approved by ISO9001, ISO14001 and OHSAS18001 systems to confirm its outstanding quality of the product.

7742 resin conforms to FDA Regulation 177.1630 which is suitable for food and beverage packaging. 7742 resin is an environmental friendly product with the important advantage of being totally recyclable.

| Items                    |            | Units                  | Value   | Test Method         |
|--------------------------|------------|------------------------|---|---------------------|
| Intrinsic Viscosity      |            | dl/g                   | 0.756 ± 0.02                                      | Refer to ASTM D4603 |
| Melting point            |            | Ç                      | 248 ± 5   | ASTM D3418          |
| Ash Content              |            | %                      | ≦ 0.02  | Ignition            |
| Moisture content         |            | %                      | <b>≦ 0.30</b>                                     | Oven                |
| Acetaldehyde             |            | ppm                    | <b>≦ 1.00</b>                                     | Gas Chromatography  |
| Acid value               |            | equ/g×10 <sup>-6</sup> | 20 ± 10   | Titration           |
| Bulk Density             |            | g/cm3                  | 0.90 ± 0.05                                       | JIS K-5101          |
| Pellet size              |            | chips/2g               | 128 ± 3   | Weight scale        |
| Fines                    |            | ppm                    | < 100   | Sieve               |
| Color                    | L value    | _                      | 88.2 ± 2.0  | ASTM E1164          |
|                          | b value    | -                      | -0.7 ± 1.0  | ASTM E1164          |
|                          | The follow | ing are provi          | ded as suggesting v                               | value for reference |
|                          | Dew point  | °C                     | -40   |                     |
| Drying<br>Condition      | Air flow   | ft <sup>3</sup> /min   | 1 / per pound chip per hour                       |                     |
|                          | Residence  | hr                     | 7~5   |                     |
|                          | Temperatu  | ıre ℃                  | 160~170   |                     |
| Moulding temperature °C  |            | 275 ~ 290              |   |                     |
| Resin storage conditions |            |                        | Store PET bag in dry and clean warehouse.         |                     |
| at converter             |            |                        | Consume PET resin within 1 year from packed date. |                     |

## **Technical Data Sheet**

(update on March 31, 2014)