

NAN YA PLASTICS CORPORATION

TAIRILIN Bottle Grade PET Resin

Type No: 3842

Tairilin 3842 is a copolymer resin with a nominal intrinsic viscosity of 0.84dl/g. This resin possesses excellent melting characteristic, optimized crystallization rate, large process window and stability during injection / stretch-blow molding.

Specifically, 3842 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. 3842 resin is suitable for applications of bottled water, cooking oil, soy sauce and alcoholic beverage applications or for the larger wide mouth bottles.

3842 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 3842 resin are approved by ISO9001 and ISO14001 and OHSAS 18001 systems. 3842 resin has been accepted by food and beverage companies as its outstanding quality for many years.

3842 resin conforms to FDA Regulation 177.1630 and European Directives, and is widely used for food and beverage packaging. 3842 resin is an environmental friendly product with the important advantage of being totally recyclable.

Technical Data Sheet

Items		Units	Value	Test Method
Intrinsic Viscosity		dl/g	0.840 ± 0.02	Refer to ASTM D4603
Melting temperature		°C	244 ± 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 ⁻⁶ equ/g	30 ± 10	Titration Method
Bulk Density		g/cm ³	0.89 ± 0.05	JIS K-5101
Chip Size		chips/2g	130 ± 3	Weight scale
Fines		ppm	< 100	Nan Ya Method
Color	L Value	-	87.5 ± 2.0	ASTM E1164
	b Value	-	-2.2 ± 1.0	ASTM E1164

The following are provided as suggesting value for reference

Drying Condition	Dew point	°C	-40
	Air flow	ft ³ /min	1 / per pound chip per hour
	Residence	hr	7 ~ 5
	Temperature	°C	160 ~ 170
Moulding temperature		°C	275 ~ 290
Resin storage conditions at converter		Store PET bag in dry and clean warehouse. Consume PET resin within 1 year from packed date.	

(update on Apr 22, 2021)