

Technical Data Sheet

Product: Polyethylene terephthalate (PET) resin for bottles Specification: FH-8088 IV. (dl/g)

0.78±0.02 (ASTM D4603)

Appearance: Milk white plastic resin with uniform size no mechanical impurities and dark spots

Property	Unit	Specification	Test Method	Test Equipment
Intrinsic Viscosity	dl/g	0.78±0.02	ASTM D4603	ZVISCO (AVM-4)
Acetaldehyde (AA)	ppm	≤1.0	SH/T 1817-2017	AGILENT (8890A+8697)
Color L	-	≥82	GB/T 17931-2018	HUNTERLAB (AGERA)
Color b	-	≤0	GB/T 17931-2018	HUNTERLAB (AGERA)
Diethylene Glycol (DEG)	%wt	1.3±0.2	GB/T 14190-2017	AGILENT (8890A+7693A)
Carboxyl End Group (-COOH)	m mol/kg	≤35	GB/T 17931-2018	METTLER (T5)
Peak Melting Temperature (DSC)	°C	245±2	GB/T 17931-2018	PE (DSC4000)
Powder	mg/kg	≤100	GB/T 14190-2017	SIEVE MESH (24-MESH)
Moisture Content	%wt	≤0.05	GB/T 14190-2017	SARTORIUS (MA-100)
Ash	%wt	≤0.03	GB/T 17931-2018	SARTORIUS (BCE 224I)
Density	g/cm ³	1.395±0.01	GB/T 17931-2018	METTLER (XSR64A)
Weight Per 100 Chips	g	1.60±0.3	WEIGH	SARTORIUS (BCE 224I)
Crystallinity	%	≥45	GB/T 17931-2018	METTLER (XSR64A)

Product Information:

Our production of bottle-grade chips using MTR[®] technology. The Melt-To-Resin (MTR[®]) process developed by Uhde Inventa-Fischer Polycondensation Technologies. With its extremely gentle process conditions throughout the MTR[®] technology can boast following outstanding product features:

MTR[®] granulate is suitable for all applications and is accepted by all major brand owners.

Homogeneous product quality in the spherical MTR[®] chips and less dust formation leads to uniform, mild drying conditions as well as minimized preform defects.

Reduced degree of crystallinity of MTR[®] product results in lower heat of fusion and consequently saves up to 10% energy for the drying and extrusion process.

Reduced AA (acetaldehyde) regeneration through the gentle conditions in the preform production process obviates the use of scavengers to meet market requirements.