

## TECHNICAL DATA SHEET

# MELPET<sup>®</sup> GS840 -r50

Properties	Value	Unit	Test Method
Intrinsic Viscosity	0,840 ± 0,02	dL/g	ASTM D4603
Acetaldehyde	≤ 1,0	ppm	ASTM F2013
Color L*	≥ 80		ASTM D6290
Color b*	≤ 3,5		ASTM D6290
Melting Point	240 ± 5	°C	ASTM D3418
Carboxylic End Group	20 ± 10	Eq/Ton	Titration Method
Bulk Density	0,88 ± 0,05	g/cm <sup>3</sup>	ASTM D1895
Moisture Content	≤ 0,2	%	ASTM 6980
Chip Size	1,6 ± 0,2	g/100 chips	Weight Scale
Crystallinity	≥ 30	%	ASTM D3418

### DESCRIPTION AND APPLICATIONS:

**MELPET<sup>®</sup> GS840 -r50** is crystalline, high molecular weight thermoplastic polymer made by continues polymerization process followed by solid-state polymerization. This resin has nominal 50% produced from post-consumer-bottle flakes via glycolysis, which are the same origin of virgin PET.

**MELPET<sup>®</sup> GS840 -r50** is especially formulated bottle grade PET for carbonated soft drink application. The resin offers enhanced barrier properties on gas permeability through the bottle surface and good mechanical properties; high burst strengths and reduce bottle distension after filling, and a low acetaldehyde content. Suitable for CSD/ aerated water for tropical conditions, alcoholic beverages, agrochemicals. It is also suitable for heat set blow molding that are used form warm fill applications.

**MELPET<sup>®</sup> GS840 -r50** resin is considered safe for food packaging applications based upon compliance with FDA regulation 21 CFR Section 177.1630, European Legislation EU 10/2011 and RoHS Directive EU RoHS 3 (EU Directive 2015/863) amend with EU RoHS 2 (EU Directive 2011/65) and its subsequent amendments for heavy metal contents.

### PROCESSING CONDITIONS:

**MELPET<sup>®</sup> GS840 -r50** has to be dried to moisture content below 30-40 ppm. The drying conditions typically used are 175°C for 6 hours; the dew point of the drying air should be at least -40 °C.

### STORAGE AND HANDLING:

PET resin should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry with relative humidity below 50% and temperatures preferably don't exceed 50°C. MELTEM KİMYA would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PET within 6 months after delivery.

**Operating With:** ISO 9001:2015 / ISO 14001:2015 / OHSAS 18001:2014