

POLYETHYLENE TEREPHTHALATE (PET RESIN)

CAS Number: 25038-59-9

Other Names: Poly(ethyl benzene-1,4-dicarboxylate)

Formula: $(C_{10}H_8O_4)_n$

PRODUCT INTRODUCTION

PET in its natural state is a colorless, semi-crystalline resin. It shows excellent resistance to alcohols, aliphatic hydrocarbons, oils, greases and diluted acids. It is the most common thermoplastic polymer resin of the polyester family and is used in fibres for clothing, containers for liquids and foods.

PHYSICAL AND CHEMICAL PROPERTIES

IV	0.790dL/g
COOH	26.3 mmol/kg
DEG	1.27 %
Dust	16 mg/kg
Ash	0.02 %
Crystallization	53.6 %
Melting Point	248.5 °C
Color	-1.3
Value L	B2.6
Water Content	0.03 %
AA	0.74 ppm
Impurities	NULL

APPLICATIONS

- The largest outlet for PET is for the production of synthetic fibres with bottle resin .
- Polyester is the largest synthetic fibre used in the world with production split roughly 60/40 between polyester filament and polyester staple. Filament yarns are used in clothing, furnishings, tyre cord and technical textiles.

- PET is used as a 3D printing filament, as well as in the 3D printing plastic PETG
- PET film is often used in tape applications, such as the carrier for magnetic tape or backing for pressure-sensitive adhesive tapes.

PACKING OPTIONS

Bags
Drums
