

Polyethylene Terephthalate (PET) Solid-State Resins

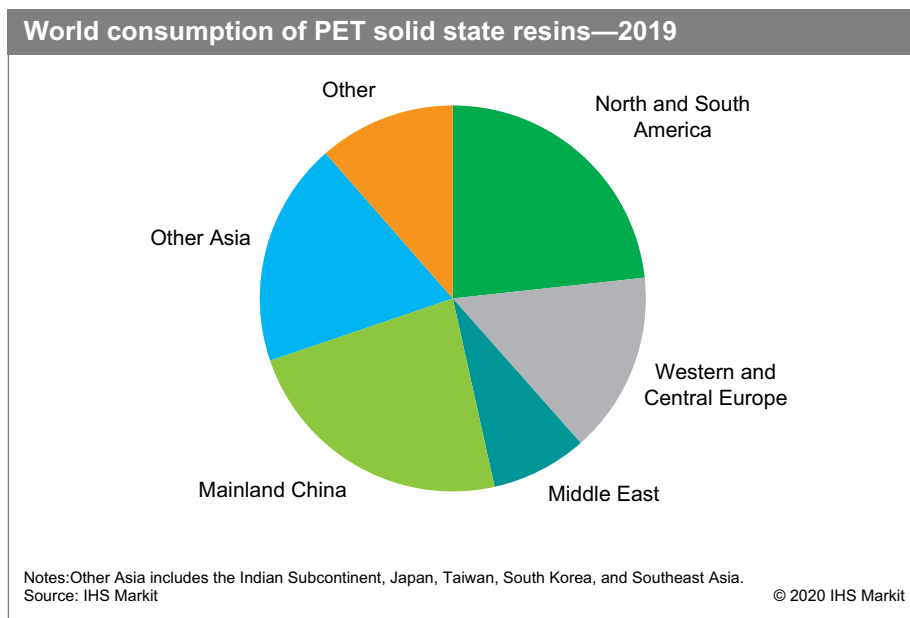
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Abstract

Polyethylene terephthalate (PET) solid-state resins belong to the broad generic class of high-molecular-weight condensation polymers known as thermoplastic polyesters. They are derived from PET melt-phase resins (also referred to as polyester melt) that are further polymerized (solid-stated) before use and therefore have a higher intrinsic viscosity. The combination of good physical, optical, and lightweight properties has allowed PET solid-state resins to gradually displace glass bottles and containers, and it remains the material of choice for these applications. This report concentrates primarily on the supply/demand for PET solid-state resins used in bottle and packaging applications.

Over the past decade, PET solid-state resin consumption has increased by more than 60%. PET resin consumption has benefitted from the substitution of heavy-walled glass containers, especially in the beverage market, and has grown at a high rate. In developed markets, PET consumption is maturing as most glass substitution has already taken place; however, in developing regions, PET resin markets are still growing, as a result of increasing GDP, changing lifestyles, and improving living standards, as well as expanding populations. Mainland China accounted for nearly one-fourth of the global PET resin consumption in 2019; consumption has grown more than 10% per year during the last 15 years. The Indian Subcontinent and Africa have had significant demand growth, while mature markets such as North America and Western Europe have had stagnating and even decreasing consumption of PET resins.

The following pie chart shows world consumption of polyethylene terephthalate (PET) solid-state resins:



Contacts

Maria deGuzman • Maria.deguzman@ihsmarkit.com

Global consumption of PET resin is led by the production of beverage containers, followed by food containers and cosmetic and pharmaceutical applications. Other PET applications such as film and sheet account for the remainder, driven primarily by developments in mainland China and the Middle East. Each region has certain preferences.

In developed regions, PET resin consumption has been affected negatively by several trends—the lightweighting of plastic bottles, the shift in consumer behavior toward lower consumption of carbonated soft drinks, and the increasing use of recycled PET (R-PET) material. The strong growth of R-PET demand has been driven primarily by legislation requiring the reduction of solid waste. Although the production of R-PET has increased over the past decade, it still represented only a small fraction of total global PET solid-state resin production in 2019.

Future growth in PET solid-state resins consumption will continue to be driven by the two largest end-use segments, beverage containers and other. As most of the glass substitution has already been achieved, PET resin consumption is currently driven primarily by the general growth of the beverage industry (containers). As such, the market is now driven heavily by emerging economies where the growing population, the improvement of living standards, and progressive westernization are driving the consumption of more bottled beverages.

For more detailed information, see the table of contents, shown below.

IHS Markit's Chemical Economics Handbook – Polyethylene Terephthalate (PET) Solid-State Resins is the comprehensive and trusted guide for anyone seeking information on this industry. This latest report details global and regional information, including



Global summary;
regional coverage



Producers with
annual capacities
and plant sites



Production figures
and trends



Consumption and
forecasts by end use
application



Manufacturing
processes and
environmental issues



Trade – imports
and exports

Key benefits

IHS Markit's Chemical Economics Handbook – Polyethylene Terephthalate (PET) Solid-State Resins has been compiled using primary interviews with key suppliers and organizations, and leading representatives from the industry in combination with IHS Markit's unparalleled access to upstream and downstream market intelligence and expert insights into industry dynamics, trade, and economics.

This report can help you

- Identify trends and driving forces influencing chemical markets
- Forecast and plan for future demand
- Understand the impact of competing materials
- Identify and evaluate potential customers and competitors
- Evaluate producers
- Track changing prices and trade movements
- Analyze the impact of feedstocks, regulations, and other factors on chemical profitability

Contents

Executive summary	6
COVID-19 impact	7
Summary	10
Introduction	14
Manufacturing processes	17
Polymerization	17
Technology	18
Conversion	20
– Blow molding	20
– Sheet and film extrusion/thermoforming (CPET And APET)	21
Recycling	23
End uses	25
Beverage containers	25
– Carbonated soft drinks	25
– Bottled water	25
– New Age beverages	26
– Alcoholic beverages	27
– Dairy products	28
Food containers	29
Nonfood containers	30
Film and sheet	31
– Amorphous PET (APET)	31
– Crystallizable PET (CPET)	32
Other	32
Supply and demand by region	34
World	34
– Capacity	34
– Producing companies	36
– Salient statistics	37
– Consumption	40
– Price	43
– Trade	45
North America	47
– Overview	47
– Capacity	47
– Salient statistics	47
– Consumption	49
– Trade	51
– United States	52
– Producing companies	52

– Salient statistics	54
– Consumption	56
– Trade	58
– Canada	58
– Producing companies	58
– Salient statistics	59
– Consumption	60
– Trade	62
– Mexico	63
– Producing companies	63
– Salient statistics	64
– Consumption	65
– Trade	67
South America	68
– Producing companies	68
– Salient statistics	69
– Consumption	70
– Trade	72
Western Europe	73
– Producing companies	73
– Salient statistics	75
– Consumption	77
– Trade	80
Central Europe	81
– Producing companies	81
– Salient statistics	81
– Consumption	83
– Trade	85
CIS and Baltic States	85
– Producing companies	85
– Salient statistics	86
– Consumption	88
– Trade	90
Middle East	91
– Producing companies	91
– Salient statistics	92
– Consumption	93
– Trade	95
Africa	96
– Producing companies	96
– Salient statistics	97
– Consumption	99
– Trade	100

Indian Subcontinent	101
– Producing companies	101
– Salient statistics	103
– Consumption	104
– Trade	106
Northeast Asia	107
– Overview	107
– Capacity	107
– Salient statistics	108
– Consumption	109
– Trade	111
– Mainland China	112
– Producing companies	112
– Salient statistics	114
– Consumption	115
– Trade	117
– Japan	118
– Producing companies	118
– Salient statistics	119
– Consumption	120
– Trade	122
– South Korea	123
– Producing companies	123
– Salient statistics	124
– Consumption	125
– Trade	127
– Taiwan	127
– Producing companies	127
– Salient statistics	128
– Consumption	130
– Trade	131
Southeast Asia	132
– Producing companies	132
– Salient statistics	134
– Consumption	135
– Trade	137
Additional resources	138
Revisions	139

IHS Markit Customer Care

CustomerCare@ihsmarkit.com

Americas: +1 800 IHS CARE (+1 800 447 2273)

Europe, Middle East, and Africa: +44 (0) 1344 328 300

Asia and the Pacific Rim: +604 291 3600

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