



PolyOlefins Planning Services

Supply and Demand Trends in Western Europe

Supplement
April 2015

This Report was prepared by Nexant, Inc. ("Nexant") and is part of the NexantThinking™ suite. Except where specifically stated otherwise in this Report, the information contained herein is prepared on the basis of information that is publicly available, and contains no confidential third party technical information to the best knowledge of Nexant. Aforesaid information has not been independently verified or otherwise examined to determine its accuracy, completeness or financial feasibility. Neither Nexant, Subscriber nor any person acting on behalf of either assumes any liabilities with respect to the use of or for damages resulting from the use of any information contained in this Report. Nexant does not represent or warrant that any assumed conditions will come to pass.

The Report is submitted on the understanding that the Subscriber will maintain the contents confidential except for the Subscriber's internal use. The Report should not be reproduced, distributed or used without first obtaining prior written consent by Nexant. Each Subscriber agrees to use reasonable effort to protect the confidential nature of the Report.

Copyright © by Nexant Inc. 2015. All rights reserved.

Contents

Section	Page
1 Executive Summary	1-1
1.1 INTRODUCTION	1-1
1.2 KEY CONCLUSIONS	1-2
2 Introduction	2-1
2.1 INTRODUCTION – SEASONALITY OF DEMAND	2-1
2.2 POLYOLEFINS CONSUMPTION BY END-USES – DEFINITIONS	2-2
2.2.1 Film	2-2
2.2.2 Injection Moulding	2-2
2.2.3 Blow Moulding	2-3
2.2.4 Fibre	2-4
2.2.5 Pipe and Conduit	2-5
2.2.6 Other Extrusion	2-5
2.2.7 Extrusion Coating	2-5
2.2.8 Rotomoulding	2-6
2.3 POLYOLEFINS CONSUMPTION BY SECTOR – DEFINITIONS	2-7
2.3.1 Packaging	2-7
2.3.2 Construction	2-9
2.3.3 Household, Sport and Leisure	2-9
2.3.4 Automotive	2-10
2.3.5 Agriculture	2-11
2.3.6 Carrier Bags	2-12
3 Western Europe Consumption Trends	3-1
3.1 REGIONAL CONSUMPTION	3-1
3.1.1 Polyolefin Consumption	3-1
3.1.2 Polyolefin Consumption by End-Use Sector	3-3
3.2 DEMAND BY END-USE SECTOR	3-7
3.2.1 Packaging	3-7
3.2.2 Construction	3-9
3.2.3 Household, Sports and Leisure Consumption	3-12
3.2.4 Automotive	3-16
3.2.5 Agriculture	3-18
3.2.6 Carrier Bags	3-21
3.3 KEY LOCATIONS DRIVING POLYOLEFIN DEMAND	3-23

4	Western Europe Supply Analysis	4-1
4.1	PRODUCTION	4-1
4.2	FEEDSTOCK.....	4-5
4.2.1	Naphtha	4-5
4.2.2	Olefins	4-5
4.3	TRADE	4-8
4.3.1	Western European Polyolefin Trade	4-8
4.3.2	Seasonal Trends for Polyolefin Trade	4-9
4.4	SUPPLY	4-13
5	Western Europe Economics	5-1
5.1	PRICING.....	5-1
5.1.1	Price Basis	5-1
5.1.2	Price Setting Mechanisms.....	5-1
5.1.3	Polyolefin Pricing Trends.....	5-1
5.2	PRODUCER ECONOMICS.....	5-4
5.2.1	Profitability.....	5-4
5.2.2	Polyethylene Profitability Trends	5-6
5.2.3	Polypropylene Profitability Trends.....	5-7

Figure	Page
1.1 Western Europe Polyolefin Consumption by End-Use Sector, 2014	1-1
3.1 Western Europe Polyolefin Consumption, 2014	3-2
3.2 Western Europe Polyolefin Consumption Growth and GDP Growth	3-3
3.3 Western Europe Polyolefin Consumption by End-Use, 2014	3-4
3.4 Western Europe End-Use Sector Consumption by Polyolefin	3-6
3.5 Manufacture of Dairy Products Index, EU-15.....	3-7
3.6 Manufacture of Prepared Meals and Dishes Index, EU-15.....	3-8
3.7 Manufacture of Plastic Packing Goods Index, EU-15	3-9
3.8 Construction Index, EU-15	3-10
3.9 Manufacture of Builders' Wares of Plastic Index, EU-15	3-11
3.10 Manufacture of Plastic Plates, Sheets, Tubes and Profiles Index, EU-15	3-11
3.11 Manufacture of Electric Domestic Appliances Index, EU-15.....	3-12
3.12 Manufacture of Other Furniture Index, EU-15.....	3-13
3.13 Manufacture of Other Plastic Products Index, EU-15	3-13
3.14 Manufacture of Sports Goods Index, EU-15	3-14
3.15 Manufacture of Toys and Games Index, EU-18.....	3-15
3.16 New Motor Vehicle Registrations, EU15 + EFTA.....	3-16
3.17 Estimated Annual Polyolefin Consumption for New Motor Vehicles, EU-15 and EFTA	3-17
3.18 Estimated Polyolefin Consumption for New Motor Vehicles	3-17
3.19 Average Weekly Temperature for Mainland and Southern Europe	3-18
3.20 Average Weekly Temperature for Northern Europe.....	3-19
3.21 Manufacture of Food Products and Beverage Index, EU-15	3-21
3.22 Average Imports of Polyethylene Bags and Sacks	3-22
3.23 Western European Polyethylene Demand by Country, 2014	Error! Bookmark not d
3.24 Western European Polypropylene Demand by Country, 2014	3-23
3.25 Distribution of Polyolefin Consumption in Western Europe by End-Use Sector, 2014	3-24
4.1 Western European Polyolefins Capacity Share by Country, 2014.....	4-1
4.2 Western European Polyolefins Capacity by Country, 2014	4-2
4.3 Western European Polyolefins Market Share by Producer, 2014.....	4-2
4.4 Western European Polyolefin Capacity by Producer, 2014	4-3
4.5 Monthly Ethylene Capacity Closures for Maintenance, 2010-2014	4-6
4.6 Monthly Average Ethylene Capacity Shutdowns and Maximum Available Capacity.....	4-6
4.7 Ethylene and Propylene Prices, 2010-2014.....	4-7
4.8 Western European Polyolefin Net Exports	4-8
4.9 Average HDPE Trade, 2005-2014	4-9

4.10	Average LDPE Trade, 2005-2014	4-10
4.11	Average LLDPE Trade, 2005-2014	4-11
4.12	Average Polypropylene Trade, 2005-2014	4-12
4.13	Estimated Average Monthly Polyolefin Supply, 2010-2014	4-13
5.1	Average Polyolefin Prices, 2010-2014	5-2
5.2	Ethylene and Polyethylene Prices, 2010-2014	5-3
5.3	Propylene and Polypropylene Prices, 2010-2014	5-3
5.4	Average Polyethylene Leader Cash Cost Margin, 2010-2014	5-6
5.5	Average Polypropylene Cash Cost Margin, 2010-2014	5-7

Table	Page
2.1 Polyolefin Film Applications	2-2
2.2 Polyolefin Injection Moulding Applications	2-3
2.3 Polyolefin Blow Moulding Applications	2-3
2.4 Polyolefin Fibre Applications	2-4
2.5 Pipe and Conduit Applications	2-5
2.6 Other Extrusion Applications	2-5
2.7 Polyolefin Extrusion Coating Applications	2-5
2.8 Rotomoulding Applications	2-6
2.9 Food and Drink Packaging End-Uses	2-8
2.10 Non-Food Packaging End-Uses	2-8
2.11 Construction Sector Applications	2-9
2.12 Household, Sport and Leisure Sector End-Uses	2-10
2.13 Automotive Applications for Plastics	2-11
2.14 Agriculture Sector End-Uses	2-12
3.1 Western Europe Polyolefin Consumption	3-2
3.2 Western Europe Polyolefin Demand by End-Use Sector, 2000-2030	3-5
4.1 Integrated Polyolefins Producers	4-4
4.2 Polyolefin Production Share by End-Use	4-4
5.1 Western Europe Leader Polyethylene Average Cash Cost Margin	5-4