

CHEMSYSTEMS PPE PROGRAM

Quarterly Business Analysis

Western Europe Supplement 2009

Issued: April 2009



Griffin House, 1st Floor South, 161 Hammersmith Road, London W6 8BS, UK
Tel: +44 20 7950 1600 Fax: +44 20 7950 1550

This Report was prepared by Nexant, Inc ("Nexant") and is part of the ChemSystems Online® 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. 2009. All rights reserved.

Contents

Section	Page
1 Introduction	1
1.1 SUMMARY	1
1.2 METHODOLOGY	2
2 Crude Oil, Refining and Petrochemical Feedstocks	16
2.1 INTRODUCTION	16
2.2 REFINERY CONFIGURATIONS AND PRODUCT YIELDS	16
3 Olefins	25
3.1 ETHYLENE	25
3.2 PROPYLENE	35
3.3 BUTADIENE	38
4 Polyolefins	40
4.1 LOW DENSITY POLYETHYLENE (LDPE)	40
4.2 LINEAR LOW DENSITY POLYETHYLENE (LLDPE)	43
4.3 HIGH DENSITY POLYETHYLENE (HDPE)	46
4.4 POLYPROPYLENE (PP)	51
5 Vinyls	54
5.1 CHLOR-ALKALI/ETHYLENE DICHLORIDE/VINYL CHLORIDE MONOMER	54
5.2 POLYVINYL CHLORIDE (PVC)	64
6 Aromatics	67
6.1 REFORMATE, BENZENE, TOLUENE AND XYLENES	67
6.2 CYCLOHEXANE	84
7 Styrenics	87
7.1 STYRENE	87
7.2 POLYSTYRENE	90
8 Polyester and Intermediates	93
8.1 ETHYLENE OXIDE (EO)/MONO ETHYLENE GLYCOL (MEG)	93
8.2 <i>PARA</i> -XYLENE AND <i>ORTHO</i> -XYLENE	99
8.3 PURIFIED TEREPHTHALIC ACID (PTA)	104
8.4 POLYETHYLENE TEREPHTHALATE (PET)	106
9 Propylene Derivatives	109
9.1 ACRYLONTRILE	109
9.2 CUMENE/PHENOL	112