

STUDY OF THE GLOBAL POLYUREA INDUSTRY



COPYRIGHT © 2007 - PUBLISHED DECEMBER 2007

POLYUREA DEVELOPMENT ASSOCIATION

400 Admiral
Kansas City, MO 64106
Phone: 816.221.0777
Fax: 816.472.7765

Researched and Prepared by:



DUCKER WORLDWIDE

1250 Maplelawn Drive
Troy, MI 48084
www.ducker.com
248.644.0086

STUDY OF THE GLOBAL POLYUREA INDUSTRY
POLYUREA DEVELOPMENT ASSOCIATION

TABLE OF CONTENTS

Table of Contents.....	2
List of Exhibits	3
Tables	3
Figures	3
Introduction	4
Methodology	5
Definition of Terms	6
Industry Overview.....	7
Summary of Global Consumption	7
Boundary Conditions	8
Implications on Market Size	8
Global Market Overview.....	9
Summary	9
Asia	12
Asian Applications	12
Asian Segmentation by Pure vs. Hybrid.....	12
Europe.....	13
European Applications.....	14
European Segmentation by Pure vs. Hybrid	14
Rest of World.....	14
Global Segmentation by Application	15
Global Segmentation by Pure vs. Hybrid.....	15
Aliphatic vs. Aromatic Formulations (North America)	18
Global Forecast.....	19
North American Market.....	20
Segmentation by Pure vs. Hybrid	20
North American Polyurea Distribution	21
North American Segmentation by Application.....	22
North American Coating Applications	23
North American Truck Bed Liners.....	25
Secondary Containment	27
Marine Coatings.....	27
Flooring & Parking Decks	28
Roof Coatings	28
Water & Wastewater Treatment Linings.....	29
Pipe & Pipeline Coatings.....	29
Theme Park & Decorative Design.....	30
Geomembranes	30
Sewer.....	30
Rail Industry.....	31
Polyurea Coatings Contractors.....	31
North American OEM Applications	34
North American Forecast	36
Appendices	37
Coating Applicators	37
Study Respondents.....	40

LIST OF EXHIBITS

TABLES

Table 1: Definition of Terms (2006 Market)	6
Table 2: Global Production Volume in 2006 (Millions).....	16
Table 3: North American Production Volume in 2006 (Millions)	16
Table 4: Regional Consumption Segmentation in 2006 (Millions).....	17
Table 5: Global Growth Forecast Through 2008	19
Table 6: North American Polyurea Applications	22
Table 7: Examples of Niche Coating Applications in 2006	24
Table 8: Equipment Expense Summary	32
Table 9: Other Niche OEM Applications in 2006.....	35
Table 10: Polyurea Forecast by Application (Gallons).....	36
Table 11: Coating Application Quality Management Challenges	38
Table 12: “Other” Applications for Polyurea as Mentioned by Study Respondents	39

FIGURES

Figure 1: Multi-faceted Approach to Primary Research.....	5
Figure 2: Global Consumption of Polyurea and Polyurethane in 2006.....	7
Figure 3: Global Truck Bed Liner Segmentation	8
Figure 4: Global Polyurea Market Volume	9
Figure 5: Global Polyurea Production by Region	9
Figure 6: Global Polyurethane Consumption by Region (by weight).....	10
Figure 7: Current and Potential Consumption of Polyurea by Region.....	11
Figure 8: Global Formulation versus Consumption in 2006	11
Figure 9: Asian Consumption by Formulation in 2006.....	12
Figure 10: European Consumption by Formulation in 2006.....	14
Figure 11: Global Consumption by Product Type	15
Figure 12: Global Polyurea Consumption in 2006	16
Figure 13: Global Consumption in 2006	17
Figure 14: North American Pure and Hybrid Segmentation	18
Figure 15: Global Consumption Forecast (2006-2011F)	19
Figure 16: North American Pure and Hybrid Segmentation	20
Figure 17: North American Supply Chain Analysis	21
Figure 18: North American Coatings Applications in 2006 (in thousands of gallons) .	23
Figure 19: Global Segmentation of Truck Bed Liner Market in 2006	26
Figure 20: North American OEM Applications in 2006 (in thousands of gallons)	34
Figure 21: North American Coating Contractor Product Usage by Volume Applied..	37
Figure 22: Respondent Segmentation	40

INTRODUCTION

The following report represents the first comprehensive global industry analysis of the market for polyurea products. This effort has been funded by the Polyurea Development Association (PDA) as part of its ongoing effort to promote clarity and understanding of the rapidly expanding polyurea technologies industry worldwide. Compilations of the data and the projections contained in the report are the product of Ducker Worldwide (Ducker), an independent global market research firm based in Troy, Michigan that has provided strategic intelligence and consulting services to the chemicals and industrial marketplace since 1961.

The research was conducted using a combination of primary and secondary research sources. As a major input to the process, Ducker receives confidential disclosures from PDA member and non-member companies at all levels of the polyurea value chain. However, multiple industry sources, such as demand models, raw material and component suppliers, and internal databases, are necessary and consistently used to triangulate market statistics. Public databases are also utilized, such as the U.S. Bureau of Census and other statistics sources.

Ducker interviewed contractors, distributors, formulators, and other industry participants which helped develop indicative product usage factors and channel volume as a cross reference to raw material manufacturers' shipment figures. Confidential disclosures are to remain confidential; as such certain market information is presented in this report in aggregate only. Further, in market segments where there is only one or a highly limited number of suppliers segment data will not be presented in order to protect the competitive interests of the industry.

By design, this inaugural industry study is intended to define the size of the supply base for polyurea products on a global basis. Given the industries established development within North America, and its position as nearly half the world market, additional market segmentation analysis has been conducted to further detail demand within this regional market. Both the PDA and Ducker Worldwide would like to thank all of the study respondents for their time and effort to participate in this comprehensive market analysis.