

# Table of Contents

---

|   |           |
|---|-----------|
| <b>I. About Us</b>  |           |
| The American Chemistry Council .....  | 5         |
| The Plastics Division of the ACC.....   | 6         |
| The Plastics Industry Producers' Statistics Group .....                       | 7         |
| ACC's Resin Report Subscriptions .....  | 8         |
| <b>II. 2010 Year in Review</b>  |           |
| Production and Sales of U.S. Plastic Resins See Rebound in 2010.....          | 9         |
| <b>III. Industry Statistics Summaries</b>                                     |           |
| Trend of Sales and Captive Use for Major Plastic Resins Graph, 2005–2010..... | 13        |
| Total U.S. Production and Sales, 1973–2010.....                               | 14        |
| 2010 Percentage Distribution of Plastic Resins by Material.....               | 15        |
| Total Production and Sales by Resin, 2000–2010 .....                          | 16        |
| <b>IV. 2010 Statistics by Resin and by Markets</b>                            |           |
| Thermoset Resins .....  | 19        |
| Thermoplastic Resins .....  | 25        |
| Thermoplastic Sales by Process Grade.....                                     | 42        |
| 2010 Percentage Distribution of Resins by Major Market.....                   | 44        |
| Thermoplastic Sales by Major Market, 2006–2010.....                           | 45        |
| Distribution of Resin Sales by Major Market, 2010 .....                       | 46        |
| <b>V. Plastics: Polymer Chemistry, Its History and Applications</b>           |           |
| History of Plastics .....   | 49        |
| The Basics of Polymer Chemistry .....   | 52        |
| How Plastics Are Made.....  | 54        |
| Monomer Flow Charts (ethylene, propylene, benzene, methanol) .....            | 57        |
| Typical Polymer Material Flow Diagram.....                                    | 61        |
| The Many Uses of Plastics.....  | 62        |
| Resin Identification Codes for Recycling.....                                 | 64        |
| <b>VI. Glossary of Terms .....</b>  | <b>67</b> |
| <b>VII. Additional Sources of Information</b>                                 |           |
| ACC's Economics & Statistics Publications.....                                | 73        |
| Trade Associations and Professional Organizations.....                        | 74        |
| Trade Publications.....   | 75        |
| Industry Consultants and Publishers.....                                      | 76        |
| Government Publications .....   | 77        |
| <b>VIII. Index.....</b>   | <b>79</b> |

**THE RESIN REVIEW**