

MARKETS AND PROFITABILITY

Market Analytics: Methanol & Derivatives - 2019

April 2019



This Report was prepared by Nexant, Inc. ("Nexant"). 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. 2019. All rights reserved.



Contents

| | | |
|----------|--------------------------------|-----------|
| 1 | Executive Summary | 1 |
| 1.1 | Introduction..... | 1 |
| 1.2 | Methanol Market Outlook | 6 |
| 1.3 | Formaldehyde | 14 |
| 1.4 | MTBE | 16 |
| 1.5 | Acetic Acid..... | 20 |
| 2 | Introduction | 27 |
| 2.1 | The Methanol Industry | 27 |
| 2.2 | Market Coverage..... | 29 |
| 3 | Methanol..... | 30 |
| 3.1 | Global | 30 |
| 3.1.1 | Key Developments | 30 |
| 3.1.2 | Consumption | 30 |
| 3.1.3 | Supply | 35 |
| 3.1.4 | Supply, Demand and Trade | 37 |
| 3.2 | North America | 40 |
| 3.2.1 | Consumption | 40 |
| 3.2.2 | Supply | 42 |
| 3.2.3 | Supply, Demand and Trade | 45 |
| 3.3 | South America..... | 48 |
| 3.3.1 | Consumption | 48 |
| 3.3.2 | Supply | 50 |
| 3.3.3 | Supply, Demand and Trade | 53 |
| 3.4 | Western Europe | 55 |
| 3.4.1 | Consumption | 55 |
| 3.4.2 | Supply | 57 |
| 3.4.3 | Supply, Demand and Trade | 59 |
| 3.5 | Central Europe | 60 |
| 3.5.1 | Consumption | 60 |
| 3.5.2 | Supply | 61 |
| 3.5.3 | Supply, Demand and Trade | 62 |
| 3.6 | Eastern Europe | 63 |
| 3.6.1 | Consumption | 63 |
| 3.6.1.1 | Russia | 63 |
| 3.6.1.2 | Other Eastern Europe | 64 |
| 3.6.2 | Supply | 65 |
| 3.6.2.1 | Russia | 65 |
| 3.6.2.2 | Other Eastern Europe | 67 |
| 3.6.3 | Supply, Demand and Trade | 68 |
| 3.6.3.1 | Russia | 68 |
| 3.6.3.2 | Other Eastern Europe | 69 |



| | | |
|----------|--------------------------------|-------------------------------------|
| 3.7 | Middle East..... | 71 |
| 3.7.1 | Consumption | 71 |
| 3.7.2 | Supply | 73 |
| 3.7.3 | Supply, Demand and Trade | 75 |
| 3.8 | Africa | 77 |
| 3.8.1 | Consumption | 77 |
| 3.8.2 | Supply | 78 |
| 3.8.3 | Supply, Demand and Trade | 81 |
| 3.9 | Asia Pacific..... | 82 |
| 3.9.1 | Consumption | 82 |
| 3.9.1.1 | North-East Asia | 82 |
| 3.9.1.2 | China | 82 |
| 3.9.1.3 | South-East Asia | 85 |
| 3.9.1.4 | South Asia..... | 86 |
| 3.9.1.5 | Australasia | 86 |
| 3.9.2 | Supply | 88 |
| 3.9.2.1 | North-East Asia | Error! Bookmark not defined. |
| 3.9.2.2 | South-East Asia | 90 |
| 3.9.2.3 | South Asia..... | 90 |
| 3.9.2.4 | Australasia | 91 |
| 3.9.3 | Supply, Demand and Trade | 100 |
| 4 | Formaldehyde..... | 103 |
| 4.1 | Global | 103 |
| 4.2 | North America | 111 |
| 4.2.1 | Consumption | 111 |
| 4.2.2 | Supply | 112 |
| 4.2.3 | Supply, Demand and Trade | 116 |
| 4.3 | South America..... | 118 |
| 4.3.1 | Consumption | 118 |
| 4.3.2 | Supply | 120 |
| 4.3.3 | Supply, Demand and Trade | 123 |
| 4.4 | Western Europe | 124 |
| 4.4.1 | Consumption | 124 |
| 4.4.2 | Supply | 125 |
| 4.4.3 | Supply, Demand and Trade | 129 |
| 4.5 | Central Europe | 130 |
| 4.5.1 | Consumption | 130 |
| 4.5.2 | Supply | 131 |
| 4.5.3 | Supply, Demand and Trade | 132 |
| 4.6 | Eastern Europe | 134 |
| 4.6.1 | Consumption | 134 |
| 4.6.1.1 | Russia | 134 |
| 4.6.1.2 | Other Eastern Europe | 135 |
| 4.6.2 | Supply | 136 |



| | | |
|----------|---|------------|
| 4.6.3 | Supply, Demand and Trade | 138 |
| 4.6.3.1 | Russia | 138 |
| 4.6.3.2 | Other Eastern Europe | 139 |
| 4.7 | Middle East..... | 141 |
| 4.7.1 | Consumption | 141 |
| 4.7.2 | Supply | 143 |
| 4.7.3 | Supply, Demand and Trade | 145 |
| 4.8 | Africa | 146 |
| 4.8.1 | Consumption | 146 |
| 4.8.2 | Supply | 147 |
| 4.8.3 | Supply, Demand and Trade | 149 |
| 4.9 | Asia Pacific..... | 150 |
| 4.9.1 | Consumption | 150 |
| 4.9.1.1 | China..... | 150 |
| 4.9.1.2 | North-East Asia | 150 |
| 4.9.1.3 | South-East Asia | 151 |
| 4.9.1.4 | South Asia..... | 151 |
| 4.9.1.5 | Australasia | 151 |
| 4.9.2 | Supply | 153 |
| 4.9.3 | Supply, Demand and Trade | 161 |
| 5 | Methyl tert-Butyl Ethyl (MTBE) | 163 |
| 5.1 | Global | 163 |
| 5.2 | North America | 170 |
| 5.2.1 | Consumption | 170 |
| 5.2.2 | Supply | 171 |
| 5.2.3 | Supply, Demand and Trade | 174 |
| 5.3 | South America..... | 177 |
| 5.3.1 | Consumption | 177 |
| 5.3.2 | Supply | 178 |
| 5.3.3 | Supply, Demand and Trade | 180 |
| 5.4 | Western Europe | 181 |
| 5.4.1 | Consumption | 181 |
| 5.4.2 | Supply | 182 |
| 5.4.3 | Supply, Demand and Trade | 185 |
| 5.5 | Central Europe | 186 |
| 5.5.1 | Consumption | 186 |
| 5.5.2 | Supply | 187 |
| 5.5.3 | Supply, Demand and Trade | 189 |
| 5.6 | Eastern Europe | 190 |
| 5.6.1 | Consumption | 190 |
| 5.6.1.1 | Russia | 190 |
| 5.6.1.2 | Other Eastern Europe | 191 |
| 5.6.2 | Supply | 191 |
| 5.6.2.1 | Russia | 191 |



| | | | |
|----------|---------|--------------------------------|------------|
| | 5.6.2.2 | Other Eastern Europe | 192 |
| | 5.6.3 | Supply, Demand and Trade | 193 |
| | 5.6.3.1 | Russia | 193 |
| | 5.6.3.2 | Other Eastern Europe | 194 |
| 5.7 | | Middle East..... | 196 |
| | 5.7.1 | Consumption | 196 |
| | 5.7.2 | Supply | 197 |
| | 5.7.3 | Supply, Demand and Trade | 200 |
| 5.8 | | Africa | 202 |
| | 5.8.1 | Consumption | 202 |
| | 5.8.2 | Supply | 202 |
| | 5.8.3 | Supply, Demand and Trade | 202 |
| 5.9 | | Asia Pacific..... | 203 |
| | 5.9.1 | Consumption | 203 |
| | 5.9.1.1 | North-East Asia | 204 |
| | 5.9.1.2 | South-East Asia | 204 |
| | 5.9.1.3 | South Asia..... | 204 |
| | 5.9.1.4 | Australasia | 204 |
| | 5.9.2 | Supply | 205 |
| | 5.9.3 | Supply, Demand and Trade | 215 |
| 6 | | Acetic Acid..... | 218 |
| | 6.1 | Global | 218 |
| | 6.2 | North America | 226 |
| | 6.2.1 | Consumption | 226 |
| | 6.2.2 | Supply | 228 |
| | 6.2.3 | Supply, Demand and Trade | 230 |
| | 6.3 | South America..... | 232 |
| | 6.3.1 | Consumption | 232 |
| | 6.3.2 | Supply | 233 |
| | 6.3.3 | Supply, Demand and Trade | 234 |
| | 6.4 | Western Europe | 235 |
| | 6.4.1 | Consumption | 235 |
| | 6.4.2 | Supply | 236 |
| | 6.4.3 | Supply, Demand and Trade | 238 |
| | 6.5 | Central Europe | 239 |
| | 6.5.1 | Consumption | 239 |
| | 6.5.2 | Supply | 240 |
| | 6.5.3 | Supply, Demand and Trade | 241 |
| | 6.6 | Eastern Europe | 242 |
| | 6.6.1 | Consumption | 242 |
| | 6.6.1.1 | Russia | 242 |
| | 6.6.1.2 | Other Eastern Europe | 242 |
| | 6.6.2 | Supply | 243 |
| | 6.6.2.1 | Russia | 243 |



| | | |
|---------|--------------------------------|-----|
| 6.6.2.2 | Other Eastern Europe | 244 |
| 6.6.3 | Supply, Demand and Trade | 244 |
| 6.6.3.1 | Russia | 244 |
| 6.6.3.2 | Other Eastern Europe | 245 |
| 6.7 | Middle East..... | 248 |
| 6.7.1 | Consumption | 248 |
| 6.7.2 | Supply | 250 |
| 6.7.3 | Supply, Demand and Trade | 252 |
| 6.8 | Africa | 253 |
| 6.8.1 | Consumption | 253 |
| 6.8.2 | Supply | 253 |
| 6.8.3 | Supply, Demand and Trade | 255 |
| 6.9 | Asia Pacific..... | 256 |
| 6.9.1 | Consumption | 256 |
| 6.9.1.1 | North-East Asia | 256 |
| 6.9.1.2 | China..... | 256 |
| 6.9.1.3 | South-East Asia | 257 |
| 6.9.1.4 | South Asia..... | 257 |
| 6.9.1.5 | Australasia | 257 |
| 6.9.2 | Supply | 259 |
| 6.9.2.1 | China..... | 259 |
| 6.9.2.2 | North-East Asia | 259 |
| 6.9.2.3 | South-East Asia | 259 |
| 6.9.2.4 | South Asia..... | 259 |
| 6.9.2.5 | Australasia | 259 |
| 6.9.3 | Supply, Demand and Trade | 265 |

Appendices

| | | |
|----------|--|------------|
| A | Methodology | 268 |
| A.1 | Market Dynamics Forecasting Methodology | 268 |
| A.1.1 | Capacity Availability and Forecasting | 268 |
| A.1.2 | End-Use Consumption Forecasting | 268 |
| A.1.2.1 | End-Use Sector Growth | 269 |
| A.1.2.2 | Penetration (New Application Growth)..... | 269 |
| A.1.2.3 | Short-term Influences..... | 270 |
| A.1.3 | Monomer Consumption Forecasting | 270 |
| A.1.4 | Production and Trade Forecasting..... | 271 |
| B | The Methanol Industry – Technology..... | 272 |
| B.1 | Methanol..... | 272 |
| B.2 | Formaldehyde | 273 |
| B.3 | MTBE | 274 |
| B.4 | Acetic Acid..... | 275 |

Figures



| | | |
|-----------|---|-----|
| Figure 1 | Share of Methanol Demand into Olefin Market | 31 |
| Figure 2 | Global Methanol Demand, 2018-e | 33 |
| Figure 3 | Global GDP Growth vs. Methanol Demand Growth | 34 |
| Figure 4 | Global Methanol Consumption | 34 |
| Figure 5 | Global Methanol Capacity Share by Marketer in 2018-e | 35 |
| Figure 6 | Global Methanol Capacity Additions/(Closures)..... | 36 |
| Figure 7 | Global Methanol Capacity | 36 |
| Figure 8 | Global Methanol Supply, Demand and Trade | 38 |
| Figure 9 | Global Methanol Exports/Imports | 39 |
| Figure 10 | North America Methanol Consumption, 2018-e | 41 |
| Figure 11 | Location of Methanol Plants in North America | 45 |
| Figure 12 | North America Methanol Supply, Demand and Trade | 46 |
| Figure 13 | United States Methanol Supply/Demand and Trade | 47 |
| Figure 14 | South America Methanol Consumption, 2018-e | 49 |
| Figure 15 | Location of Methanol Plants in South America..... | 52 |
| Figure 16 | South America Methanol Supply, Demand and Trade | 54 |
| Figure 17 | Western Europe Methanol Consumption by Derivative by 2018-e | 56 |
| Figure 18 | Location of Methanol Plants in Western Europe | 58 |
| Figure 19 | Western Europe Methanol Supply, Demand and Trade | 59 |
| Figure 20 | Central Europe Methanol Consumption, 2018-e | 60 |
| Figure 21 | Location of Methanol Plants in Central Europe | 61 |
| Figure 22 | Central Europe Methanol Supply, Demand and Trade | 62 |
| Figure 23 | Russia Methanol Consumption, 2018-e | 63 |
| Figure 24 | Other Eastern Europe Methanol Demand by Derivative, 2018-e..... | 64 |
| Figure 25 | Location of Methanol Plants in Russia | 66 |
| Figure 26 | Location of Methanol Plants in Other Eastern Europe | 67 |
| Figure 27 | Russia Methanol Supply, Demand and Trade..... | 68 |
| Figure 28 | Other Eastern Europe Methanol Supply, Demand and Trade | 69 |
| Figure 29 | Total Eastern Europe Methanol Supply, Demand and Trade | 70 |
| Figure 30 | Middle East Methanol Consumption, 2018-e | 72 |
| Figure 31 | Location of Methanol Capacity in the Middle East | 75 |
| Figure 32 | Middle East Methanol Supply, Demand and Trade..... | 76 |
| Figure 33 | Africa Methanol Consumption, 2018-e | 77 |
| Figure 34 | Location of Methanol Capacity in Africa | 80 |
| Figure 35 | Africa Methanol Supply, Demand and Trade | 81 |
| Figure 36 | Asia Pacific Methanol Consumption, 2018-e..... | 87 |
| Figure 37 | Location of Methanol Plants in China | 98 |
| Figure 38 | Location of Methanol Plants in China (Cont.)..... | 99 |
| Figure 39 | Location of Methanol Plants in India | 99 |
| Figure 40 | Asia Pacific Methanol Supply, Demand and Trade | 101 |
| Figure 41 | China Methanol Supply, Demand and Trade | 102 |
| Figure 42 | Global Formaldehyde Demand, 2018-e | 105 |
| Figure 43 | Global GDP Growth vs. Formaldehyde Consumption Growth | 105 |
| Figure 44 | Global Formaldehyde Consumption | 106 |



| | | |
|------------------|--|-----|
| Figure 45 | Global Formaldehyde Capacity Share by Marketer in 2018-e | 107 |
| Figure 46 | Global Formaldehyde Capacity Additions/(Closures) | 108 |
| Figure 47 | Global Formaldehyde Capacity | 108 |
| Figure 48 | Global Formaldehyde Supply, Demand and Trade | 109 |
| Figure 49 | Global Formaldehyde Supply, Demand and Trade | 109 |
| Figure 50 | Regional Formaldehyde Exports/Imports | 110 |
| Figure 51 | North America Formaldehyde Demand, 2018-e | 111 |
| Figure 52 | Location of Formaldehyde Plants in North America | 115 |
| Figure 53 | Location of Formaldehyde Plants in USGC | 115 |
| Figure 54 | North America Formaldehyde Supply, Demand and Trade | 116 |
| Figure 55 | United States Formaldehyde Supply, Demand and Trade | 117 |
| Figure 56 | South America Formaldehyde Demand, 2018-e | 119 |
| Figure 57 | Location of Formaldehyde Plants in South America | 122 |
| Figure 58 | South America Formaldehyde Supply, Demand and Trade | 123 |
| Figure 59 | Western Europe Formaldehyde Demand, 2018-e | 124 |
| Figure 60 | Location of Formaldehyde Plants in Western Europe | 128 |
| Figure 61 | Western Europe Formaldehyde Supply, Demand and Trade | 129 |
| Figure 62 | Central Europe Formaldehyde Demand, 2018-e | 130 |
| Figure 63 | Location of Formaldehyde Plants in Central Europe | 132 |
| Figure 64 | Central Europe Formaldehyde Supply, Demand and Trade | 133 |
| Figure 65 | Russia Formaldehyde Demand, 2018-e | 134 |
| Figure 66 | Other Eastern Europe Formaldehyde Demand, 2018-e | 135 |
| Figure 67 | Location of Formaldehyde Plants in Russia | 136 |
| Figure 68 | Location of Formaldehyde Plants in Other Eastern Europe | 137 |
| Figure 69 | Russia Formaldehyde Supply, Demand and Trade | 138 |
| Figure 70 | Other Eastern Europe Formaldehyde Supply, Demand and Trade | 139 |
| Figure 71 | Total Eastern Europe Formaldehyde Supply, Demand and Trade | 140 |
| Figure 72 | Middle East Formaldehyde Demand, 2018-e | 142 |
| Figure 73 | Location of Formaldehyde Plants in Middle East | 144 |
| Figure 74 | Middle East Formaldehyde Supply, Demand and Trade | 145 |
| Figure 75 | Africa Formaldehyde Demand, 2018-e | 146 |
| Figure 76 | Location of Formaldehyde Plants in Africa | 148 |
| Figure 77 | Africa Formaldehyde Supply, Demand and Trade | 149 |
| Figure 78 | Asia Pacific Formaldehyde Demand, 2018-e | 151 |
| Figure 79 | Location of Formaldehyde Plants in China | 158 |
| Figure 80 | Location of Formaldehyde Plants in Japan and South Korea | 159 |
| Figure 81 | Location of Formaldehyde Plants South-East Asia, Australia and New Zealand | 159 |
| Figure 82 | Location of Formaldehyde Plants in India | 160 |
| Figure 83 | Asia Pacific Formaldehyde Supply, Demand and Trade | 161 |
| Figure 84 | China Formaldehyde Supply, Demand and Trade | 162 |
| Figure 85 | Global GDP Growth vs. MTBE Consumption Growth | 164 |
| Figure 86 | Global MTBE Consumption | 165 |
| Figure 87 | Global MTBE Capacity Share by Marketer in 2018-e | 166 |
| Figure 88 | Global MTBE Capacity Additions/(Closures) | 167 |



| | | |
|-------------------|--|-----|
| Figure 89 | Global MTBE Capacity | 167 |
| Figure 90 | Global MTBE Supply, Demand and Trade | 168 |
| Figure 91 | Regional MTBE Exports/Imports | 169 |
| Figure 92 | Location of MTBE Plants in North America | 173 |
| Figure 93 | North America MTBE Supply, Demand and Trade | 175 |
| Figure 94 | United States MTBE Supply, Demand and Trade | 176 |
| Figure 95 | Location of MTBE Plants in South America | 179 |
| Figure 96 | South America MTBE Supply, Demand and Trade | 180 |
| Figure 97 | Location of MTBE Plants in Western Europe | 184 |
| Figure 98 | Western Europe MTBE Supply, Demand and Trade | 185 |
| Figure 99 | Location of MTBE Capacity in Central Europe | 188 |
| Figure 100 | Central Europe MTBE Supply, Demand and Trade | 189 |
| Figure 101 | Location of MTBE Capacity in Russia | 192 |
| Figure 102 | Russia MTBE Supply, Demand and Trade | 193 |
| Figure 103 | Other Eastern Europe MTBE Supply, Demand and Trade | 194 |
| Figure 104 | Total Eastern Europe MTBE Supply/Demand and Trade | 195 |
| Figure 105 | Location of MTBE Plants in Middle East | 199 |
| Figure 106 | Middle East MTBE Supply, Demand and Trade | 201 |
| Figure 107 | Location of MTBE Plants in China | 211 |
| Figure 108 | Location of MTBE Plants in China | 212 |
| Figure 109 | Location of MTBE Plants in Japan and South Korea | 213 |
| Figure 110 | Location of MTBE Plants South-East Asia | 214 |
| Figure 111 | Location of MTBE Plants in India | 214 |
| Figure 112 | Asia Pacific MTBE Supply, Demand and Trade | 216 |
| Figure 113 | China MTBE Supply, Demand and Trade | 217 |
| Figure 114 | Global Acetic Acid Demand, 2018-e | 219 |
| Figure 115 | Global GDP Growth vs. Acetic Acid Consumption Growth | 220 |
| Figure 116 | Global Acetic Acid Consumption by Region | 220 |
| Figure 117 | Global Acetic Acid Capacity Share by Marketer, 2018-e | 221 |
| Figure 118 | Global Acetic Acid Capacity Additions/(Closures) | 222 |
| Figure 119 | Global Acetic Acid Capacity | 222 |
| Figure 120 | Global Acetic Acid Supply and Demand | 224 |
| Figure 121 | Regional Acetic Acid Exports/Imports | 225 |
| Figure 122 | North America Acetic Acid Consumption, 2018-e | 227 |
| Figure 123 | Location of Acetic Acid Plants in North America | 229 |
| Figure 124 | North America Acetic Acid Supply, Demand and Trade | 230 |
| Figure 125 | United States Acetic Acid Supply, Demand and Trade | 231 |
| Figure 126 | South America Acetic Acid Consumption, 2018-e | 233 |
| Figure 127 | South America Acetic Acid Supply, Demand and Trade | 234 |
| Figure 128 | Western Europe Acetic Acid Consumption, 2018-e | 235 |
| Figure 129 | Location of Acetic Acid Plants in Western Europe | 237 |
| Figure 130 | Western Europe Acetic Acid Supply, Demand and Trade | 238 |
| Figure 131 | Central Europe Acetic Acid Consumption, 2018-e | 239 |
| Figure 132 | Location of Acetic Acid Plants in Central Europe | 240 |



| | | |
|------------|---|-----|
| Figure 133 | Central Europe Acetic Acid Supply, Demand and Trade | 241 |
| Figure 134 | Russia Acetic Acid Consumption, 2018-e | 242 |
| Figure 135 | Location of Acetic Acid Plants in Russia | 244 |
| Figure 136 | Russia Europe Acetic Acid Supply, Demand and Trade | 244 |
| Figure 137 | Other Eastern Europe Acetic Acid Supply, Demand and Trade | 246 |
| Figure 138 | Total Eastern Europe Acetic Acid Supply/Demand and Trade | 247 |
| Figure 139 | Middle East Consumption, 2018-e | 249 |
| Figure 140 | Location of Acetic Acid Plants in Middle East | 251 |
| Figure 141 | Middle East Acetic Acid Supply, Demand and Trade | 252 |
| Figure 142 | Location of Acetic Acid Plants in Africa | 254 |
| Figure 143 | Africa Acetic Acid Supply, Demand and Trade | 255 |
| Figure 144 | Asia Pacific Acetic Acid Consumption, 2018-e..... | 258 |
| Figure 145 | Location of Acetic Acid Plants in China..... | 262 |
| Figure 146 | Location of Acetic Acid Plants in Japan and North Korea..... | 263 |
| Figure 147 | Location of Acetic Acid Plants in South-East Asia | 263 |
| Figure 148 | Location of Acetic Acid Plants in India | 264 |
| Figure 149 | Asia Pacific Acetic Acid Supply, Demand and Trade | 265 |
| Figure 150 | China Acetic Acid Supply, Demand and Trade | 266 |
| Figure 151 | End-Use Consumption Drivers | 269 |
| Figure 152 | Monomer Consumption Drivers | 270 |
| Figure 153 | Trade Considerations | 271 |

Tables

| | | |
|----------|--|----|
| Table 1 | Global Methanol Consumption by End-Use | 33 |
| Table 2 | Global Methanol Consumption by Region..... | 34 |
| Table 3 | Global Methanol Supply, Demand and Trade | 38 |
| Table 4 | North America Methanol Consumption by End-Use | 41 |
| Table 5 | North America Methanol Consumption by Country | 41 |
| Table 6 | Methanol Capacity in North America | 44 |
| Table 7 | North America Methanol Supply, Demand and Trade | 46 |
| Table 8 | United States Methanol Supply, Demand and Trade | 47 |
| Table 9 | South America Methanol Consumption by End-Use | 49 |
| Table 10 | South America Methanol Consumption by Country | 49 |
| Table 11 | Methanol Capacity in South America | 51 |
| Table 12 | South America Methanol Supply, Demand and Trade | 54 |
| Table 13 | Western Europe Methanol Demand by End-Use | 56 |
| Table 14 | Methanol Capacity in Western Europe | 57 |
| Table 15 | Western Europe Methanol Supply, Demand and Trade | 59 |
| Table 16 | Central Europe Methanol Consumption by End-Use | 60 |
| Table 17 | Methanol Capacity in Central Europe..... | 61 |
| Table 18 | Central Europe Methanol Supply, Demand and Trade | 62 |
| Table 19 | Russia Methanol Consumption by End-Use..... | 63 |
| Table 20 | Other Eastern Europe Methanol Demand by End-Use | 64 |
| Table 21 | Methanol Capacity in Russia | 66 |



| | | |
|----------|---|-----|
| Table 22 | Methanol Capacity in Other Eastern Europe | 67 |
| Table 23 | Russia Methanol Supply, Demand and Trade..... | 68 |
| Table 24 | Other Eastern Europe Methanol Supply, Demand and Trade | 69 |
| Table 25 | Total Eastern Europe Methanol Supply, Demand and Trade | 70 |
| Table 26 | Middle East Methanol Demand by End-Use | 72 |
| Table 27 | Middle East Demand by Country..... | 72 |
| Table 28 | Methanol Capacity in the Middle East | 74 |
| Table 29 | Middle East Methanol Supply, Demand and Trade..... | 76 |
| Table 30 | Africa Methanol Demand by End-Use | 77 |
| Table 31 | Africa Methanol Demand by Country | 77 |
| Table 32 | Methanol Capacity in Africa | 79 |
| Table 33 | Africa Methanol Supply, Demand and Trade | 81 |
| Table 34 | Asia Pacific Methanol Consumption by End-Use | 87 |
| Table 35 | Asia Pacific Methanol Consumption by Country | 88 |
| Table 36 | Methanol Capacity in Asia Pacific | 92 |
| Table 37 | Asia Pacific Methanol Supply, Demand and Trade | 101 |
| Table 38 | China Methanol Supply, Demand and Trade | 102 |
| Table 39 | Global Consumption by Derivative | 105 |
| Table 40 | Global Formaldehyde Consumption by Region..... | 106 |
| Table 41 | North America Formaldehyde Consumption by Derivative | 111 |
| Table 42 | North America Formaldehyde Consumption by Country..... | 112 |
| Table 43 | Formaldehyde Capacity in North America..... | 113 |
| Table 44 | North America Formaldehyde Supply, Demand and Trade | 116 |
| Table 45 | United States America Formaldehyde Supply, Demand and Trade | 117 |
| Table 46 | South America Formaldehyde Consumption by Derivative..... | 119 |
| Table 47 | South America Formaldehyde Consumption by Country | 119 |
| Table 48 | Formaldehyde Capacity in South America | 121 |
| Table 49 | South America Formaldehyde Supply, Demand and Trade..... | 123 |
| Table 50 | Western Europe Formaldehyde Consumption by Derivative | 124 |
| Table 51 | Formaldehyde Capacity in Western Europe..... | 125 |
| Table 52 | Western Europe Formaldehyde Supply, Demand and Trade | 129 |
| Table 53 | Central Europe Formaldehyde Consumption by Derivative | 130 |
| Table 54 | Formaldehyde Capacity in Central Europe | 131 |
| Table 55 | Central Europe Formaldehyde Supply, Demand and Trade | 133 |
| Table 56 | Russian Formaldehyde Consumption by Derivative | 134 |
| Table 57 | Other Eastern Europe Formaldehyde Consumption by Derivative | 135 |
| Table 58 | Formaldehyde Capacity in Russia..... | 136 |
| Table 59 | Formaldehyde Capacity Other Eastern Europe | 137 |
| Table 60 | Russia Formaldehyde Supply, Demand and Trade | 138 |
| Table 61 | Other Eastern Europe Formaldehyde Supply, Demand and Trade | 139 |
| Table 62 | Total Eastern Europe Formaldehyde Supply, Demand and Trade | 140 |
| Table 63 | Middle East Formaldehyde Consumption by Derivative | 142 |
| Table 64 | Middle East Formaldehyde Consumption by Country | 142 |
| Table 65 | Formaldehyde Capacity in the Middle East..... | 143 |



| | | |
|------------------|---|-------------------------------------|
| Table 66 | Middle East Formaldehyde Supply, Demand and Trade | 145 |
| Table 67 | Africa Formaldehyde Consumption by Derivative | 146 |
| Table 68 | Africa Formaldehyde Consumption by Country | 146 |
| Table 69 | Formaldehyde Capacity in Africa | 147 |
| Table 70 | Africa Formaldehyde Supply, Demand and Trade | 149 |
| Table 71 | Asia Pacific Formaldehyde Consumption by Derivative..... | 152 |
| Table 72 | Asia Pacific Formaldehyde Consumption by Country | 152 |
| Table 73 | Formaldehyde Capacity in Asia Pacific | Error! Bookmark not defined. |
| Table 74 | Asia Pacific Formaldehyde Supply, Demand and Trade..... | 161 |
| Table 75 | China Formaldehyde Supply, Demand and Trade..... | 162 |
| Table 76 | Global MTBE Consumption | 164 |
| Table 77 | Global MTBE Consumption by Region | 165 |
| Table 78 | Global MTBE Supply, Demand and Trade | 168 |
| Table 79 | North America MTBE Consumption | 171 |
| Table 80 | North America MTBE Consumption by Country..... | 171 |
| Table 81 | MTBE Capacity in North America..... | 172 |
| Table 82 | North America MTBE Supply, Demand and Trade | 175 |
| Table 83 | United States MTBE Supply, Demand and Trade..... | 176 |
| Table 84 | South America MTBE Consumption..... | 177 |
| Table 85 | South America MTBE Consumption by Country | 177 |
| Table 86 | MTBE Capacity in South America | 178 |
| Table 87 | South America MTBE Supply, Demand and Trade..... | 180 |
| Table 88 | Western Europe MTBE Consumption | 181 |
| Table 89 | MTBE Capacity in Western Europe..... | 183 |
| Table 90 | Western Europe MTBE Supply, Demand and Trade | 185 |
| Table 91 | Central Europe MTBE Consumption | 186 |
| Table 92 | MTBE Capacity in Central Europe | 187 |
| Table 93 | Central Europe MTBE Supply, Demand and Trade | 189 |
| Table 94 | Russia MTBE Consumption | 190 |
| Table 95 | Other Eastern Europe MTBE Consumption | 191 |
| Table 96 | MTBE Capacity in Russia..... | 192 |
| Table 97 | Russia MTBE Supply, Demand and Trade | 193 |
| Table 98 | Other Eastern Europe MTBE Supply, Demand and Trade | 194 |
| Table 99 | Total Eastern Europe MTBE Supply/Demand and Trade | 195 |
| Table 100 | Middle East MTBE Consumption | 196 |
| Table 101 | Middle East Consumption by Country | 197 |
| Table 102 | MTBE Capacity in the Middle East..... | 198 |
| Table 103 | Middle East MTBE Supply, Demand and Trade..... | 201 |
| Table 104 | Asia Pacific MTBE Consumption..... | 205 |
| Table 105 | Asia Pacific MTBE Consumption by Country | 205 |
| Table 106 | MTBE Capacity in Asia Pacific | 207 |
| Table 107 | Asia Pacific MTBE Supply, Demand and Trade..... | 216 |
| Table 108 | China MTBE Supply, Demand and Trade | 217 |
| Table 109 | Global Acetic Acid Consumption by Derivative | 219 |



| | | |
|------------------|--|------------|
| Table 110 | Global Acetic Acid Consumption by Region | 220 |
| Table 111 | Global Acetic Acid Supply and Demand..... | 224 |
| Table 112 | North America Acetic Acid Consumption by Derivative | 227 |
| Table 113 | North America Acetic Acid Consumption by Country | 227 |
| Table 114 | Acetic Acid Capacity in North America..... | 228 |
| Table 115 | North America Acetic Acid Supply, Demand and Trade | 230 |
| Table 116 | United States Acetic Acid Supply, Demand and Trade | 231 |
| Table 117 | South America Acetic Acid Consumption by Derivative..... | 233 |
| Table 118 | South America Acetic Acid Consumption by Country | 233 |
| Table 119 | South America Acetic Acid Supply, Demand and Trade..... | 234 |
| Table 120 | Western Europe Acetic Acid Consumption by Derivative | 235 |
| Table 121 | Acetic Acid Capacity in Western Europe..... | 236 |
| Table 122 | Western Europe Acetic Acid Supply, Demand and Trade | 238 |
| Table 123 | Central Europe Acetic Acid Consumption by Derivative | 239 |
| Table 124 | Acetic Acid Capacity in Central Europe..... | 240 |
| Table 125 | Central Europe Acetic Acid Supply, Demand and Trade | 241 |
| Table 126 | Russia Acetic Acid Consumption by Derivative..... | 242 |
| Table 127 | Other Eastern Europe Acetic Acid Consumption by Derivative | 243 |
| Table 128 | Acetic Acid Capacity in Russia..... | 243 |
| Table 129 | Russia Acetic Acid Supply, Demand and Trade..... | 245 |
| Table 130 | Other Eastern Europe Acetic Acid Supply, Demand and Trade | 246 |
| Table 131 | Total Eastern Europe Acetic Acid Supply/Demand and Trade | 247 |
| Table 132 | Middle East Acetic Acid Consumption by Derivative..... | 249 |
| Table 133 | Middle East Acetic Acid Consumption by Country | 249 |
| Table 134 | Acetic Acid Capacity in the Middle East..... | 250 |
| Table 135 | Middle East Acetic Acid Supply, Demand and Trade..... | 252 |
| Table 136 | Africa Acetic Acid Consumption by Derivative | 253 |
| Table 137 | Africa Acetic Acid Consumption by Country..... | 253 |
| Table 138 | Acetic Acid Capacity in Africa..... | 253 |
| Table 139 | Africa Acetic Acid Supply, Demand and Trade | 255 |
| Table 140 | Asia Pacific Acetic Acid Consumption by Derivative | 258 |
| Table 141 | Asia Pacific Acetic Acid Consumption by Country | 258 |
| Table 142 | Acetic Acid Capacity in Asia Pacific | 260 |
| Table 143 | Asia Pacific Acetic Acid Supply, Demand and Trade | 265 |
| Table 144 | China Acetic Acid Supply, Demand and Trade | 266 |