

# World Markets for Precipitated Silica 2008

A Market Research Report  
published **July 2008**



## HISTORICAL TRENDS & FORECASTS

Markets	Applications
Regional Demand	Pricing
Suppliers	Market Share
Capacity & Expansions	Product Developments

**Overview:** *World Markets for Precipitated Silica 2008* provides an up-to-date and comprehensive overview of the \$2 billion global market for precipitated silica and sodium aluminum silicates, which are fillers and performance additives used across a wide range of products, including fuel-efficient tires, rubber goods, footwear, dentifrice, food/feed, paper, plastics, and paint. The report covers all regions and 18 leading countries. Data are presented for all years from 2002 through 2007, with forecasts provided for 2008, 2009, 2010, 2015, and 2025.

**Features:** The 2008 edition of *World Markets for Precipitated Silica* is fully revised and expanded. The most significant addition to this version is the inclusion of a **separate Excel spreadsheet** containing all of the data from the report in tabular form. Other features include:

- Capacity by company and plant for all years 2005 thru 2010 (including planned expansions)
- Highly dispersible silica capacity by company and plant
- Silica demand by market and function for all countries and regions
- Updated & expanded supplier profiles, including many leading Chinese producers
- Market share by company for major markets and regions (NA, EU, Asia)

**Price:** \$4,950 for hard copy or electronic PDF version (single-user license); \$6,950 for both versions. Purchase an Electronic Corporate Use License for an additional \$950 for unlimited access to the report within your organization.

For more information, contact Notch Consulting at: P.O. Box 1243 | Amherst, MA 01004-1243  
**Ph:** 413-253-7733 | **Email:** info@notchconsulting.com | **Web:** www.notchconsulting.com

## Table of Contents

<b>Study Sections, ● Tables &amp; Figures</b>	<b>Page</b>
<b>Notes &amp; Acknowledgments</b>	11
<b>1. Executive Summary &amp; Key Statistics</b>	14
1.1 Precipitated Silica Market Trends	14
● <i>Table 1: Precipitated Silica Markets</i>	18
1.2 Precipitated Silica Application Trends	19
● <i>Table 2: Precipitated Silica Applications</i>	20
1.3 Precipitated Silica Regional Trends	20
● <i>Table 3: Regional Demand for Precipitated Silica</i>	22
1.4 Precipitated Silica Market Share	22
● <i>Table 4: Market Shares of Leading Precipitated Silica Suppliers</i>	24
<b>2. Overview</b>	25
2.1 What is Precipitated Silica?	25
2.2 Specialty Silicas: Market Size, Types & Characteristics	26
● <i>Table 5: World Demand for Specialty Silicas by Type, 2007</i>	28
● <i>Table 6: Horizontal Integration among Precipitated Silica Producers</i>	29
2.3 Pricing Trends	30
● <i>Table 7: Precipitated Silica Average Pricing by Region</i>	31
● <i>Table 8: Regional Prices for Precipitated Silica Grades, 2008</i>	32
2.4 Manufacturing	33
2.4.1 Conventional Manufacturing Process	34
● <i>Figure 1: Manufacturing Process for Liquid Sodium Silicate</i>	36
● <i>Figure 2: Manufacturing Process for Precipitated Silica &amp; Aluminum Silicates</i>	37
2.4.2 Alternative Manufacturing Processes	38
2.4.3 Product Characteristics	41
2.5 Research & Development	43
2.6 Regulatory & Environmental Issues	45
2.6.1 California's Fuel-Efficient Tire Program	46
2.6.2 US National Fuel-Efficient Tire Program	49
2.6.3 Increase in US Fuel Economy Standards	50
2.6.4 Transportation Research Board Tire Fuel Economy Report	51
2.6.5 REACH Legislation Takes Effect in EU	52
2.7 Overview of the Rubber & Tire Sectors	54
2.7.1 World Rubber Consumption	54
● <i>Table 9: World Rubber Consumption</i>	56
2.7.2 World Tire Production	57
● <i>Table 10: World Tire Production</i>	59

## Table of Contents

<b>Study Sections, ● Tables &amp; Figures</b>	<b>Page</b>
<b>3. Regional Demand for Precipitated Silica</b>	60
3.1 Regional Demand Overview	60
● <i>Table 11: Precipitated Silica Demand by Region</i>	62
3.2 Capacity by Region & Projected Capacity Requirements	63
● <i>Table 12: World Precipitated Silica Capacity by Region, Year-end 2007</i>	64
3.3 North America	65
3.3.1 North America: Precipitated Silica Markets	65
● <i>Table 13: North America Precipitated Silica Demand by Country</i>	68
● <i>Table 14: North America: Precipitated Silica Demand by Market &amp; Application</i>	69
3.3.2 North America: Precipitated Silica Producers & Capacity	70
● <i>Table 15: North America: Annual Sales of Precipitated Silica Suppliers, 2007</i>	70
● <i>Table 16: North America: Precipitated Silica Capacity, Year-end 2007</i>	71
3.3.3 Canada	72
● <i>Table 17: Canada: Precipitated Silica Demand by Market &amp; Application</i>	74
3.3.4 Mexico	75
Mexico: Precipitated Silica Markets	75
● <i>Table 18: Mexico: Precipitated Silica Demand by Market &amp; Application</i>	76
Mexico: Precipitated Silica Producers & Capacity	77
● <i>Table 19: Mexico: Precipitated Silica Capacity, Year-end 2007</i>	77
3.3.5 United States	78
US: Precipitated Silica Markets	78
● <i>Table 20: United States: Precipitated Silica Demand by Market &amp; Application</i>	81
US: Precipitated Silica Producers & Capacity	82
● <i>Table 21: United States: Precipitated Silica Capacity, Year-end 2007</i>	83
3.4 European Union (EU 25)	84
3.4.1 EU: Precipitated Silica Markets	84
● <i>Table 22: European Union Precipitated Silica Demand by Country</i>	86
● <i>Table 23: European Union Precipitated Silica Demand by Market &amp; Application</i>	87
3.4.2 EU: Precipitated Silica Producers & Capacity	88
● <i>Table 24: European Union: Annual Sales of Precipitated Silica Suppliers, 2007</i>	89
● <i>Table 25: European Union: Precipitated Silica Capacity, Year-end 2007</i>	90
3.4.3 France	91
France: Precipitated Silica Markets	91
● <i>Table 26: France: Precipitated Silica Demand by Market &amp; Application</i>	92
France: Precipitated Silica Producers & Capacity	93
● <i>Table 27: France: Precipitated Silica Capacity, Year-end 2007</i>	93

## Table of Contents

<b>Study Sections, ● Tables &amp; Figures</b>	<b>Page</b>
3.4.4 Germany	94
Germany: Precipitated Silica Markets	94
● <i>Table 28: Germany: Precipitated Silica Demand by Market &amp; Application</i>	95
Germany: Precipitated Silica Producers & Capacity	96
● <i>Table 29: Germany: Precipitated Silica Capacity, Year-end 2007</i>	96
3.4.5 Italy	97
Italy: Precipitated Silica Markets	97
● <i>Table 30: Italy: Precipitated Silica Demand by Market &amp; Application</i>	98
Italy: Precipitated Silica Producers & Capacity	99
● <i>Table 31: Italy: Precipitated Silica Capacity, Year-end 2007</i>	99
3.4.6 Poland	100
● <i>Table 32: Poland: Precipitated Silica Demand by Market &amp; Application</i>	101
3.4.7 Spain	102
Spain: Precipitated Silica Markets	102
● <i>Table 33: Spain: Precipitated Silica Demand by Market &amp; Application</i>	103
Spain: Precipitated Silica Producers & Capacity	104
● <i>Table 34: Spain: Precipitated Silica Capacity, Year-end 2007</i>	104
3.4.8 United Kingdom	105
UK: Precipitated Silica Markets	105
● <i>Table 35: UK: Precipitated Silica Demand by Market &amp; Application</i>	106
UK: Precipitated Silica Producers & Capacity	107
● <i>Table 36: UK: Precipitated Silica Capacity, Year-end 2007</i>	107
3.4.9 Other European Union Countries	108
Other EU Countries: Precipitated Silica Markets	108
● <i>Table 37: Other EU Countries: Precipitated Silica Demand by Market &amp; Application</i>	110
Other EU Countries; Precipitated Silica Producers & Capacity	111
● <i>Table 38: Other EU Countries: Precipitated Silica Capacity, Year-end 2007</i>	111
3.5 Asia	112
3.5.1 Asia: Precipitated Silica Markets	112
● <i>Table 39: Asia: Precipitated Silica Demand by Country</i>	114
● <i>Table 40: Asia: Precipitated Silica Demand by Market &amp; Application</i>	115
3.5.2 Asia: Precipitated Silica Producers & Capacity	116
● <i>Table 41: Asia: Annual Sales of Precipitated Silica Suppliers, 2007</i>	117
● <i>Table 42: Asia: Precipitated Silica Capacity by Country, Year-end 2007</i>	118
● <i>Table 43: Asia: Precipitated Silica Capacity by Company, Year-end 2007</i>	119

## Table of Contents

<b>Study Sections, ● Tables &amp; Figures</b>	<b>Page</b>
3.5.3 China	120
China: Precipitated Silica Markets	120
● <i>Table 44: China: Precipitated Silica Demand by Market &amp; Application</i>	122
China: Precipitated Silica Producers & Capacity	123
● <i>Table 45: China: Precipitated Silica Capacity – Multinational Suppliers</i>	125
● <i>Table 46: China: Precipitated Silica Capacity – Local Suppliers</i>	126
3.5.4 India	127
India: Precipitated Silica Markets	127
● <i>Table 47: India: Precipitated Silica Demand by Market &amp; Application</i>	128
India: Precipitated Silica Producers & Capacity	129
● <i>Table 48: India: Precipitated Silica Capacity, Year-end 2007</i>	130
3.5.5 Indonesia	131
Indonesia: Precipitated Silica Markets	131
● <i>Table 49: Indonesia: Precipitated Silica Demand by Market &amp; Application</i>	132
Indonesia: Precipitated Silica Producers & Capacity	133
● <i>Table 50: Indonesia: Precipitated Silica Capacity, Year-end 2007</i>	133
3.5.6 Japan	134
Japan: Precipitated Silica Markets	134
● <i>Table 51: Japan: Precipitated Silica Demand by Market &amp; Application</i>	135
Japan: Precipitated Silica Producers & Capacity	136
● <i>Table 52: Japan: Precipitated Silica Capacity, Year-end 2007</i>	136
3.5.7 South Korea	137
South Korea: Precipitated Silica Markets	137
● <i>Table 53: South Korea: Precipitated Silica Demand by Market &amp; Application</i>	138
South Korea: Precipitated Silica Producers & Capacity	139
● <i>Table 54: South Korea: Precipitated Silica Capacity, Year-end 2007</i>	139
3.5.8 Taiwan	140
Taiwan: Precipitated Silica Markets	140
● <i>Table 55: Taiwan: Precipitated Silica Demand by Market &amp; Application</i>	141
Taiwan: Precipitated Silica Producers & Capacity	142
● <i>Table 56: Taiwan: Precipitated Silica Capacity, Year-end 2007</i>	142
3.5.9 Thailand	143
Thailand: Precipitated Silica Markets	143
● <i>Table 57: Thailand: Precipitated Silica Demand by Market &amp; Application</i>	144
Thailand: Precipitated Silica Producers & Capacity	145
● <i>Table 58: Thailand: Precipitated Silica Capacity, Year-end 2007</i>	146
3.5.10 Other Asian Countries	147
● <i>Table 59: Other Asia: Precipitated Silica Demand by Market &amp; Application</i>	148

## Table of Contents

<b>Study Sections, ● Tables &amp; Figures</b>	<b>Page</b>
3.6 South America	149
3.6.1 South America: Precipitated Silica Markets	149
● <i>Table 60: South America: Precipitated Silica Demand by Market &amp; Application</i>	151
3.6.2 South America: Precipitated Silica Producers & Capacity	152
● <i>Table 61: South America: Precipitated Silica Capacity, Year-end 2007</i>	152
3.6.3 Brazil	153
Brazil: Precipitated Silica Markets	153
● <i>Table 62: Brazil: Precipitated Silica Demand by Market &amp; Application</i>	154
Brazil: Precipitated Silica Producers & Capacity	155
● <i>Table 63: Brazil: Precipitated Silica Capacity, Year-end 2007</i>	155
3.6.4 Other South American Countries	156
Other South American Countries: Precipitated Silica Markets	156
● <i>Table 64: Other S. America: Precipitated Silica Demand by Market &amp; Application</i>	157
Other South American Countries: Precipitated Silica Producers & Capacity	158
● <i>Table 65: Other South America: Precipitated Silica Capacity, Year-end 2007</i>	158
3.7 Eastern Europe	159
3.7.1 Eastern Europe: Precipitated Silica Markets	159
● <i>Table 66: Eastern Europe: Precipitated Silica Demand by Market &amp; Application</i>	161
3.7.2 Eastern Europe: Precipitated Silica Producers & Capacity	162
● <i>Table 67: Eastern Europe: Precipitated Silica Capacity, Year-end 2007</i>	162
3.7.3 Russia	163
● <i>Table 68: Russia: Precipitated Silica Demand by Market &amp; Application</i>	164
3.7.4 Other Eastern European Countries	165
● <i>Table 69: Other East Europe: Precipitated Silica Demand by Market &amp; Application</i>	166
3.8 Africa & the Middle East	167
3.8.1 Africa & the Middle East: Precipitated Silica Markets	167
● <i>Table 70: Africa/Middle East: Precipitated Silica Demand by Market &amp; Application</i>	168
3.8.2 Africa & the Middle East: Precipitated Silica Producers & Capacity	169
● <i>Table 71: Turkey: Precipitated Silica Capacity, Year-end 2007</i>	170
<b>4. Markets for Precipitated Silica</b>	<b>171</b>
4.1 Overview	171
● <i>Table 72: Precipitated Silica Demand by Market</i>	172
4.2 Tires	173
4.2.1 Tire Markets: Silica Applications & Properties	173
● <i>Table 73: Silica Applications in Tire Components</i>	174
4.2.2 Tire Markets: Rolling Resistance & the 'Magic Triangle'	175
● <i>Figure 3: The 'Magic Triangle' of Tire Performance Characteristics</i>	176
4.2.3 Tire Markets: Advantages and Disadvantages of Silica & Carbon Black	176
● <i>Table 74: Carbon Black &amp; Precipitated Silica: Advantages &amp; Disadvantages</i>	178
4.2.4 Tire Markets: Reinforcing Fillers Demand (Carbon Black vs. Silica)	179
● <i>Table 75: Demand for Reinforcing Fillers in the Tire Industry</i>	180

## Table of Contents

Study Sections, ● <i>Tables &amp; Figures</i>	Page
4.2.5 Tire Markets: Price Comparison – Silica/Silane Fillers versus Carbon Black	180
● <i>Table 76: Price Comparison of Reinforcing Fillers for the Tire Industry: Silica/Silane versus Carbon Black</i>	182
4.2.6 Tire Markets: Growth Forecasts	182
● <i>Table 77: Tire Markets for Precipitated Silica</i>	185
4.2.7 Conventional Uses in Tire Markets: Growth Forecasts	186
● <i>Table 78: Precipitated Silica Demand in Tire Markets – Conventional Uses</i>	187
4.2.8 Green Tire Markets: Growth Forecasts	187
● <i>Table 79: Precipitated Silica Demand in Tire Markets – Green Tires</i>	189
4.2.9 Highly Dispersible Silica Suppliers & Capacity	190
● <i>Table 80: Highly Dispersible Silica – Capacity by Company &amp; Plant, 2007</i>	193
4.2.10 Tire Markets: Suppliers & Market Share	194
● <i>Table 81 Tire Markets: Annual Sales of Precipitated Silica Suppliers, 2007</i>	194
● <i>Table 82: Precipitated Silica Grades for Tires</i>	195
4.3. Non-Tire Rubber Goods	196
● <i>Table 83: Non-Tire Rubber Markets for Precipitated Silica</i>	197
4.3.1 Non-Tire Rubber Markets: Suppliers & Market Share	198
● <i>Table 84: Non-Tire Markets: Annual Sales of Precipitated Silica Suppliers, 2007</i>	198
4.3.2 Mechanical Rubber Goods	199
MRG Markets: Silica Applications & Properties	199
MRG Markets: Growth Forecasts	200
● <i>Table 85: Mechanical Rubber Goods Markets for Precipitated Silica</i>	201
MRG Markets: Silica Suppliers & Tradenames	202
● <i>Table 86: Precipitated Silica Grades for Mechanical Rubber Goods</i>	203
4.3.3 Footwear Markets	204
Footwear Markets: Silica Applications & Properties	204
Footwear Markets: Growth Forecasts	205
● <i>Table 87: Footwear Markets for Precipitated Silica</i>	206
Footwear Markets: Silica Suppliers & Tradenames	206
● <i>Table 88: Precipitated Silica Grades for Footwear</i>	207
4.4 Dentifrice	208
4.4.1 Dentifrice Markets: Silica Applications & Properties	208
4.4.2 Dentifrice Markets: Silica Types	209
4.4.3 Dentifrice Markets: Toothpaste Ingredients & Formulations	210
4.4.4 Dentifrice Markets: Growth Forecasts	212
● <i>Table 89: Dentifrice Markets for Precipitated Silica</i>	214
4.4.5 Dentifrice Markets: Suppliers & Market Share	214
● <i>Table 90: Dentifrice Markets: Annual Sales of Precipitated Silica Suppliers, 2007</i>	216
● <i>Table 91: Precipitated Silica Grades for Dentifrice Applications</i>	217
4.5 Nutrition & Health	218
4.5.1 Nutrition & Health Markets: Growth Forecasts	218
● <i>Table 92: Nutrition &amp; Health Markets for Precipitated Silica</i>	220
4.5.2 Nutrition & Health Markets: Suppliers & Market Share	221
● <i>Table 93: Nutrition &amp; Health: Annual Sales of Precipitated Silica Suppliers, 2007</i>	221

## Table of Contents

<b>Study Sections, ● Tables &amp; Figures</b>	<b>Page</b>
4.5.3 Food	222
Food Markets: Silica Applications & Properties	222
● <i>Figure 4: Food Industry Applications for Precipitated Silica</i>	224
Food Markets: Regulatory Environment	224
Food Markets: Growth Forecasts	227
● <i>Table 94: Food Markets for Precipitated Silica</i>	229
Food Markets: Silica Suppliers & Tradenames	230
● <i>Table 95: Precipitated Silica Grades for Food Applications</i>	231
4.5.4 Agricultural Feed	232
Agricultural Feed: Silica Applications & Properties	232
Agricultural Feed: Growth Forecasts	233
● <i>Table 96: Agricultural Feed Markets for Precipitated Silica</i>	234
Agricultural Feed: Silica Suppliers & Tradenames	235
● <i>Table 97: Precipitated Silica Grades for Agricultural Feed</i>	236
4.5.5 Cosmetics & Pharmaceuticals	237
Cosmetics & Pharma Markets: Silica Applications & Properties	237
Cosmetics & Pharma Markets: Growth Forecasts	238
● <i>Table 98: Cosmetics &amp; Pharmaceutical Markets for Precipitated Silica</i>	239
Cosmetics & Pharma Markets: Silica Suppliers & Tradenames	240
● <i>Table 99: Precipitated Silica Grades for Cosmetics &amp; Pharmaceuticals</i>	240
4.6 Paper	241
4.6.1 Paper Markets: Silica Applications & Properties	241
4.6.2 Paper Markets: Growth Forecasts	242
● <i>Table 100: Paper Markets for Precipitated Silica</i>	243
4.6.3 Paper Markets: Suppliers & Market Share	244
● <i>Table 101: Paper Markets: Annual Sales of Precipitated Silica Suppliers, 2007</i>	244
● <i>Table 102: Precipitated Silica Grades for Paper</i>	245
4.7 Plastics & Battery Separators	246
4.7.1 Plastics Markets: Growth Forecasts	246
● <i>Table 103: Plastic &amp; Battery Separator Markets for Precipitated Silica</i>	247
Plastics Markets: Battery Separators	248
Plastics Markets: Antiblocking Applications	249
4.7.2 Plastics Markets: Suppliers & Market Share	250
● <i>Table 104: Plastics Markets: Annual Sales of Precipitated Silica Suppliers, 2007</i>	250
● <i>Table 105: Precipitated Silica Grades for Battery Separators &amp; Plastics</i>	251

## Table of Contents

<b>Study Sections, ● Tables &amp; Figures</b>	<b>Page</b>
4.8 Paints, Coatings & Inks	252
4.8.1 Paints, Coatings & Inks: Silica Applications & Properties	252
4.8.2 Paints, Coatings & Inks: Growth Forecasts	253
● <i>Table 106: Paint, Coating &amp; Ink Markets for Precipitated Silica</i>	253
Paints, Coatings & Inks: Matting/Flatting Agent Applications	255
Paints, Coatings & Inks: Thickener & Pigment Extender Applications	256
4.8.3 Paints, Coatings & Inks: Suppliers & Market Share	257
● <i>Table 107: Paint, Coating &amp; Ink Markets: Annual Sales of Precipitated Silica Suppliers, 2007</i>	258
● <i>Table 108: Precipitated Silica Grades for Paints, Coatings &amp; Ink</i>	259
4.9 Pesticides & Other Markets	260
4.9.1 Pesticides & Other Markets: Silica Applications & Properties	260
4.9.2 Pesticides & Other Markets: Growth Forecasts	261
● <i>Table 109: Pesticides &amp; Other Markets for Precipitated Silica</i>	262
4.9.3 Pesticides & Other Markets: Suppliers & Market Share	262
● <i>Table 110: Precipitated Silica Grades for Pesticides &amp; Other Markets</i>	263
<b>5. Applications for Precipitated Silica</b>	<b>264</b>
5.1 Overview	264
● <i>Table 111: Major Applications &amp; Markets for Precipitated Silica</i>	266
● <i>Table 112: Precipitated Silica Demand by Application</i>	266
5.2 Fillers & Extenders	267
● <i>Table 113: Filler &amp; Extender Applications for Precipitated Silica</i>	268
5.4 Thickening Agents	268
● <i>Table 114: Thickening Agent Applications for Precipitated Silica</i>	269
5.5 Abrasive & Polishing Agents	270
● <i>Table 115: Abrasive &amp; Polishing Agent Applications for Precipitated Silica</i>	270
5.3 Free Flow & Anti-caking Agents	271
● <i>Table 116: Free Flow &amp; Anti-caking Agent Applications for Precipitated Silica</i>	272
5.6 Carriers	273
● <i>Table 117: Carrier Applications for Precipitated Silica</i>	273
5.7 Other Applications	274
● <i>Table 118: Other Applications for Precipitated Silica</i>	275
<b>6. Suppliers &amp; Capacity</b>	<b>276</b>
6.1 Industry Participants & Concentration Levels	276
● <i>Figure 5: Concentration Levels in the Global Precipitated Silica Industry, 2007</i>	276
6.2 Suppliers & Market Share	277
● <i>Table 119: Precipitated Silica Annual Sales &amp; Capacity by Company</i>	279
6.3 Acquisitions & Restructuring Trends	280
DETAILS ON FIVE ACQUISITION/RESTRUCTURING PROJECTS AFFECTING THE SILICA INDUSTRY	
● <i>Table 120: Acquisitions &amp; Restructuring in the Precipitated Silica Industry, 2007–2008</i>	283

## Table of Contents

<b>Study Sections, ● Tables &amp; Figures</b>	<b>Page</b>
6.4 Precipitated Silica Capacity by Company	283
● <i>Table 121: World Precipitated Silica Capacity by Company, Year-end 2007</i>	284
6.4.1 Evonik Industries	285
● <i>Table 122: Evonik: Precipitated Silica Capacity by Plant, Year-end 2007</i>	287
6.4.2 Rhodia SA	288
● <i>Table 123: Rhodia: Precipitated Silica Capacity by Plant, Year-end 2007</i>	289
6.4.3 Huber Engineered Materials	290
● <i>Table 124: Huber: Precipitated Silica Capacity by Plant, Year-end 2007</i>	291
6.4.4 PPG Industries	292
● <i>Table 125: PPG Industries: Precipitated Silica Capacity by Plant, Year-end 2007</i>	293
6.4.5 Tokuyama/Oriental Silicas Group	294
● <i>Table 126: Tokuyama/OSC Group: Precip Silica Capacity by Plant, Year-end 2007</i>	294
6.4.6 Other Leading Producers	295
● <i>Table 127: Other Leading Producers: Precipitated Silica Capacity, Year-end 2007</i>	296
6.5 Capacity Expansions & Rationalizations	297
DETAILS ON TEN RECENT & PROPOSED PROJECTS AFFECTING PRECIPITATED SILICA PRODUCTION CAPACITY	
● <i>Table 128: Recent &amp; Proposed Capacity Expansion Activity</i>	302
6.6 Supplier Profiles	303
PROFILES OF 25 LEADING SUPPLIERS OF PRECIPITATED SILICA – Profiles include contact information, company sales, precipitated silica sales, company overview, facilities and capacity, expansion projects, and product lines	