HUNTSMAN INTERNATIONAL LLC Form 10-K February 12, 2013

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# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

**WASHINGTON, D.C. 20549** 

# Form 10-K

(Mark One)

ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED DECEMBER 31, 2012

OR

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Exact Name of Registrant as Specified in its

Commission File Number	Charter, Principal Office Address and Telephone Number	State of Incorporation/Organization	I.R.S. Employer Identification No.
001-32427	Huntsman Corporation	Delaware	42-1648585
	500 Huntsman Way		
	Salt Lake City, Utah 84108		
	(801) 584-5700		
333-85141	Huntsman International LLC	Delaware	87-0630358
	500 Huntsman Way		
	Salt Lake City, Utah 84108		
	(801) 584-5700		

Securities registered pursuant to Section 12(b) of the Exchange Act:

Registrant
Huntsman Corporation
Huntsman International LLC

Registrant

Title of each class
Name of each exchange on which registered
New York Stock Exchange
None
None
None
Securities registered pursuant to Section 12(g) of the Exchange Act:

RegistrantTitle of each classHuntsman CorporationNoneHuntsman International LLCNone

Edgar Filing: HUNTSMAN INTERNATIONAL LLC - Form 10-K YES ý NO o **Huntsman Corporation** Huntsman International LLC YES o NO ý Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. **Huntsman Corporation** YES o Huntsman International LLC NO ý YES o Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. **Huntsman Corporation** YES ý NO o YES ý Huntsman International LLC Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES ý **Huntsman Corporation** NO o Huntsman International LLC YES ý NO o Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrants' knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ý Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. **Huntsman Corporation** Large accelerated filer ý Accelerated filer Non-accelerated filer o Smaller reporting company o o Accelerated filer Huntsman Non-accelerated filer ý Large accelerated filer o Smaller reporting International LLC company o o Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Huntsman Corporation YES o NO ý Huntsman International LLC YES o NO ý On June 30, 2012, the last business day of the registrants' most recently completed second fiscal quarter, the aggregate market value of voting and non-voting common equity held by non-affiliates was as follows: Registrant **Common Equity** Market Value Held by Nonaffiliates **Huntsman Corporation** Common Stock \$2,402,844,866(1) Huntsman International LLC Units of Membership Interest \$0(2) (1)

Based on the closing price of \$12.94 per share of common stock as quoted on the New York Stock Exchange.

(2)All units of membership interest are held by Huntsman Corporation, an affiliate.

On February 1, 2013, the number of shares outstanding of each of the registrant's classes of common equity were as follows:

Registrant **Common Equity** Outstanding 239,851,526 **Huntsman Corporation** Common Stock Huntsman International LLC Units of Membership Interest 2,728

This Annual Report on Form 10-K presents information for two registrants: Huntsman Corporation and Huntsman International LLC. Huntsman International LLC is a wholly owned subsidiary of Huntsman Corporation and is the principal operating company of Huntsman Corporation. The information reflected in this Annual Report on Form 10-K is equally applicable to both Huntsman Corporation and Huntsman International LLC, except where otherwise indicated.

Huntsman International LLC meets the conditions set forth in General Instructions (I)(1)(a) and (b) of Form 10-K and, to the extent applicable, is therefore filing this form with a reduced disclosure format.

## **Documents Incorporated by Reference**

Part III: Proxy Statement for the 2013 Annual Meeting of Stockholders to be filed within 120 days of Huntsman Corporation's fiscal year ended December 31, 2012.

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# HUNTSMAN CORPORATION AND SUBSIDIARIES HUNTSMAN INTERNATIONAL LLC AND SUBSIDIARIES 2012 ANNUAL REPORT ON FORM 10-K

With respect to Huntsman Corporation, certain information set forth in this report contains "forward-looking statements" within the meaning of the federal securities laws. Huntsman International is a limited liability company and, pursuant to Section 21E(b)2(E) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the safe-harbor for certain forward-looking statements is not applicable to it

Forward-looking statements include statements concerning our plans, objectives, goals, strategies, future events, future revenues or performance, capital expenditures, financing needs, plans or intentions relating to acquisitions or dispositions and other information that is not historical information. In some cases, forward-looking statements can be identified by terminology such as "believes," "expects," "may," "will," "should," "anticipates" or "intends" or the negative of such terms or other comparable terminology, or by discussions of strategy. We may also make additional forward-looking statements from time to time. All such subsequent forward-looking statements, whether written or oral, by us or on our behalf, are also expressly qualified by these cautionary statements.

All forward-looking statements, including without limitation management's examination of historical operating trends, are based upon our current expectations and various assumptions. Our expectations, beliefs and projections are expressed in good faith and we believe there is a reasonable basis for them, but there can be no assurance that management's expectations, beliefs and projections will result or be achieved. All forward-looking statements apply only as of the date made. We undertake no obligation to publicly update or revise forward-looking statements which may be made to reflect events or circumstances after the date made or to reflect the occurrence of unanticipated events.

There are a number of risks and uncertainties that could cause our actual results to differ materially from the forward-looking statements contained in or contemplated by this report. Any forward-looking statements should be considered in light of the risks set forth in "Part I. Item 1A. Risk Factors" and elsewhere in this report.

This report includes information with respect to market share, industry conditions and forecasts that we obtained from internal industry research, publicly available information (including industry publications and surveys), and surveys and market research provided by consultants. The publicly available information and the reports, forecasts and other research provided by consultants generally state that the information contained therein has been obtained from sources believed to be reliable. We have not independently verified any of the data from third-party sources, nor have we ascertained the underlying economic assumptions relied upon therein. Similarly, our internal research and forecasts are based upon our management's understanding of industry conditions, and such information has not been verified by any independent sources.

For convenience in this report, the terms "Company," "our," "us," or "we" may be used to refer to Huntsman Corporation and, unless the context otherwise requires, its subsidiaries and predecessors. Any references to our "Company," "we," "us" or "our" as of a date prior to October 19, 2004 (the date of our formation) are to Huntsman Holdings, LLC and its subsidiaries (including their respective predecessors). In this report, "Huntsman International" refers to Huntsman International LLC (our 100% owned subsidiary) and, unless the context otherwise requires, its subsidiaries; "HPS" refers to Huntsman Polyurethanes Shanghai Ltd. (our consolidated splitting joint venture with Shanghai Chlor-Alkali Chemical Company, Ltd); "Sasol-Huntsman" refers to Sasol-Huntsman GmbH and Co. KG (our consolidated joint venture with Sasol that owns and operates a maleic anhydride facility in Moers, Germany); "HCCA" refers to Huntsman Chemical Company Australia Pty Limited (our 100% owned subsidiary); and "SLIC" refers to Shanghai Liengheng Isocyanate Investment BV (an unconsolidated manufacturing joint venture with BASF and three Chinese chemical companies).

In this report, we may use, without definition, the common names of competitors or other industry participants. We may also use the common names or abbreviations for certain chemicals or products. Many of these terms are defined in the Glossary of Chemical Terms found at the conclusion of "Part I. Item 1. Business" below.

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#### PART I

## ITEM 1. BUSINESS

#### **GENERAL**

We are a global manufacturer of differentiated organic chemical products and of inorganic chemical products. Our Company, a Delaware corporation, was formed in 2004 to hold the businesses of Huntsman Holdings, LLC, a company founded by Jon M. Huntsman. Mr. Huntsman founded the predecessor to our Company in 1970 as a small polystyrene plastics packaging company. Since then, we have grown through a series of significant acquisitions and now own a global portfolio of businesses.

We operate all of our businesses through Huntsman International, our 100% owned subsidiary. Huntsman International is a Delaware limited liability company and was formed in 1999.

Our principal executive offices are located at 500 Huntsman Way, Salt Lake City, Utah 84108, and our telephone number at that location is (801) 584-5700.

#### RECENT DEVELOPMENTS

#### PO/MTBE Joint Venture in China

On November 13, 2012, we entered into an agreement to form a joint venture with Sinopec ("Nanjing Jinling"). The joint venture will involve the construction and operation of a PO/MTBE facility in China. Under the joint venture agreement, we will have a 49% interest in the joint venture and Sinopec will hold a 51% interest. Our equity investment is anticipated to be approximately \$120 million, and we expect to receive significant license fees from the joint venture. The timing of equity contributions and license fee payments depends on various factors, but the majority are intended to be made over the course of the construction period of the plant (expected to be completed by the end of 2014).

## **OVERVIEW**

Our products comprise a broad range of chemicals and formulations which we market globally to a diversified group of consumer and industrial customers. Our products are used in a wide range of applications, including those in the adhesives, aerospace, automotive, construction products, personal care and hygiene, durable and non-durable consumer products, electronics, medical, packaging, paints and coatings, power generation, refining, synthetic fiber, textile chemicals and dye industries. We are a leading global producer in many of our key product lines, including MDI, amines, surfactants, epoxy-based polymer formulations, textile chemicals, dyes, maleic anhydride and titanium dioxide. Our administrative, research and development and manufacturing operations are primarily conducted at the facilities listed in "Item 2. Properties" below, which are located in 30 countries. As of December 31, 2012, we employed approximately 12,000 associates worldwide. Our revenues for the years ended December 31, 2012, 2011 and 2010 were \$11,187 million, \$11,221 million and \$9,250 million, respectively.

We operate in five segments: Polyurethanes, Performance Products, Advanced Materials, Textile Effects and Pigments. In a series of transactions beginning in 2006, we sold our North American polymers and base chemicals operations and substantially shutdown all of our Australian styrenics operations. We report the results of these businesses as discontinued operations in our statements of operations. See "Note 25. Discontinued Operations" to our consolidated financial statements.

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# **Our Products**

We produce differentiated organic and inorganic chemical products. Our Polyurethanes, Performance Products, Advanced Materials and Textile Effects segments produce differentiated organic chemical products and our Pigments segment produces inorganic chemical products.

Growth in our differentiated products has been driven by the substitution of our products for other materials and by the level of global economic activity. Accordingly, the profitability of our differentiated products has been somewhat less influenced by the cyclicality that typically impacts the petrochemical industry. Our Pigments business, while cyclical, is influenced by seasonal demand patterns in the coatings industry.

Percentage allocations in this chart do not give effect to Corporate and other unallocated items and eliminations. For a reconciliation of Adjusted EBITDA to net income attributable to Huntsman Corporation and cash provided by operating activities, see "Part II. Item 7.

Management's Discussion and Analysis of Financial Condition and Results of Operations Results of Operations."

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The following table identifies the key products, their principal end markets and applications and representative customers of each of our segments:

Segment	Products	End Markets and Applications	Representative Customers
Polyurethanes	MDI, PO, polyols, PG, TPU, aniline and MTBE	Refrigeration and appliance insulation, construction products, adhesives, automotive, footwear, furniture, cushioning, specialized engineering applications and fuel additives	BMW, CertainTeed, Electrolux, Firestone, GE, Haier, Louisiana Pacific, PMI, Recticel, Weyerhaeuser
Performance Products	Amines, surfactants, LAB, maleic anhydride, other performance chemicals, EG, olefins and technology licenses	Detergents, personal care products, agrochemicals, lubricant and fuel additives, adhesives, paints and coatings, construction, marine and automotive products, composites, and PET fibers and resins	Afton, Chevron, Dow, Henkel, L'Oreal, Lubrizol, Monsanto, Procter & Gamble, Reichhold, Sun Products, Unilever
Advanced Materials	Basic liquid and solid epoxy resins; specialty resin compounds; cross-linking, matting and curing agents; epoxy, acrylic and polyurethane-based formulations	Aerospace and industrial adhesives, composites for aerospace, automotive, and wind power generation; construction and civil engineering; industrial coatings; electrical power transmission; consumer electronics	ABB, AkzoNobel, Bodo Moller, Cytec, Freeman, Henkel, Hexcel, ISOLA, Lianyungang, Omya, PPG, Ribelin, RPM, Sanarrow, Schneider, Sherwin Williams, Siemens, Sika, Speed Fair, Syngenta, Toray,
Textile Effects	Textile chemicals and dyes	Apparel, home and technical textiles	Aunde, Esquel Group, Fruit of the Loom, Guilford Mills, Hanesbrands, Nice Dyeing, Polartec, Tencate, Y.R.C., Zaber & Zubair
Pigments	Titanium dioxide	Paints and coatings, plastics, paper, printing inks, fibers and ceramics	AkzoNobel, Clariant, Jotun, PolyOne, PPG

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## **Polyurethanes**

#### General

We are a leading global manufacturer and marketer of a broad range of polyurethane chemicals, including MDI products, PO, polyols, PG and TPU. Polyurethane chemicals are used to produce rigid and flexible foams, as well as coatings, adhesives, sealants and elastomers. We focus on the higher-margin, higher-growth markets for MDI and MDI-based polyurethane systems. Growth in our Polyurethanes segment has been driven primarily by the continued substitution of MDI-based products for other materials across a broad range of applications. We operate 5 primary Polyurethanes manufacturing facilities in the U.S., Europe and China. We also operate 17 Polyurethanes formulation facilities, which are located in close proximity to our customers worldwide.

Our customers produce polyurethane products through the combination of an isocyanate, such as MDI or TDI, with polyols, which are derived largely from PO and EO. While the range of TDI-based products is relatively limited, we are able to produce over 2,000 distinct MDI-based polyurethane products by modifying the MDI molecule through varying the proportion and type of polyol used and by introducing other chemical additives to our MDI formulations. As a result, polyurethane products, especially those derived from MDI, are continuing to replace traditional products in a wide range of end use markets, including insulation in construction and appliances, cushioning for automotive and furniture, adhesives, wood binders, footwear and other specialized engineering applications.

We are one of three North American producers of PO. We and some of our customers process PO into derivative products, such as polyols for polyurethane products, PG and various other chemical products. End uses for these derivative products include applications in the home furnishings, construction, appliances, packaging, automotive and transportation, food, paints and coatings and cleaning products industries. We also produce MTBE as a co-product of our PO manufacturing process. MTBE is an oxygenate that is blended with gasoline to reduce harmful vehicle emissions and to enhance the octane rating of gasoline. See "Item 1A. Risk Factors."

In 1992, we were the first global supplier of polyurethane chemicals to open a technical service center in China. We have since expanded this facility to include an integrated polyurethanes formulation facility. In January 2003, we entered into two related joint ventures to build MDI production and finishing facilities near Shanghai, China. Production at our MDI finishing plant near Shanghai, China operated by HPS, a consolidated joint venture, was commissioned on June 30, 2006. Production at the MNB, aniline and crude MDI plants operated by SLIC, an unconsolidated joint venture, commenced on September 30, 2006. These world-scale facilities strengthen our ability to service our customers in the critical Chinese market and will support the significant demand growth that we believe this region will continue to experience. Additionally, in November 2012, we entered into an agreement to form a joint venture to build a world scale PO and MTBE plant in Nanjing, China. The facility is expected to be completed by the end of 2014, and it will utilize our proprietary PO/MTBE manufacturing technology. We will own a 49% interest in the joint venture.

During 2012, our Polyurethanes segment implemented a restructuring program to reduce annualized fixed costs by \$75 million by the third quarter of 2013. In connection with this program, we recorded restructuring expenses of \$38 million during 2012 primarily for workforce reductions.

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#### **Products and Markets**

MDI is used primarily in rigid foam applications and in a wide variety of customized, higher-value flexible foam and coatings, adhesives, sealants and elastomers. Polyols, including polyether and polyester polyols, are used in conjunction with MDI and TDI in rigid foam, flexible foam and other non-foam applications. PO is one of the principal raw materials for producing polyether polyols. The following chart illustrates the range of product types and end uses for polyurethane chemicals.

Polyurethane chemicals are sold to customers who combine the chemicals to produce polyurethane products. Depending on their needs, customers will use either commodity polyurethane chemicals produced for mass sales or polyurethane systems tailored for their specific requirements. By varying the blend, additives and specifications of the polyurethane chemicals, manufacturers are able to develop and produce a breadth and variety of polyurethane products.

*MDI*. MDI has a substantially larger market size and a higher growth rate than TDI. This is primarily because MDI can be used to make polyurethanes with a broader range of properties and can therefore be used in a wider range of applications than TDI. We believe that future growth of MDI is expected to be driven by the continued substitution of MDI-based polyurethane for fiberglass and other materials currently used in rigid insulation foam for construction. We expect that other markets, such as binders for reconstituted wood board products, specialty cushioning applications and coatings will further contribute to the continued growth of MDI.

With the recent rapid growth of the developing Asian economies, the Asian markets have now become the largest market for MDI.

*TPU*. TPU is a high-quality, fully formulated thermal plastic derived from the reaction of MDI or an aliphatic isocyanate with polyols to produce unique qualities such as durability, flexibility, strength, abrasion-resistance, shock absorbency and chemical resistance. We can tailor the performance characteristics of TPU to meet the specific requirements of our customers. TPU is used in injection molding and small components for the automotive and footwear industries. It is also extruded into films, wires and cables for use in a wide variety of applications in the coatings, adhesives, sealants and elastomers markets.

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*Polyols.* Polyols are combined with MDI, TDI and other isocyanates to create a broad spectrum of polyurethane products. Demand for specialty polyols has been growing at approximately the same rate at which MDI consumption has grown.

Aniline. Aniline is an intermediate chemical used primarily to manufacture MDI. Generally, aniline is either consumed internally by the producers of the aniline or is sold to third parties under long-term supply contracts. We believe that the lack of a significant spot market for aniline means that in order to remain competitive, MDI manufacturers must either be integrated with an aniline manufacturing facility or have a long-term, cost-competitive aniline supply contract.

**PO.** PO is an intermediate chemical used mainly to produce a wide range of polyols and PG. Demand for PO depends largely on overall economic demand, especially that of consumer durables. The following chart illustrates the primary end markets and applications for PO.

MTBE. MTBE is an oxygenate that is blended with gasoline to reduce harmful vehicle emissions and to enhance the octane rating of gasoline. While MTBE has been effectively eliminated in the United States, demand continues to grow in other regions of the world. In 2011 we announced the signing of a license agreement with Chinese chemicals manufacturer Yantai Wanhua Polyurethanes Co., Ltd, for the production of PO and MTBE. See "Part I. Item 1A. Risk Factors." We continue to sell MTBE for use as a gasoline additive, substantially all of which is sold for use outside the U.S. See "Manufacturing and Operations" below and "Part II. Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations."

# Sales and Marketing

Our global sales group markets our polyurethane chemicals to over 3,500 customers in more than 90 countries. Our sales and technical resources are organized to support major regional markets, as well as key end use markets which require a more global approach. These key end use markets include the appliance, automotive, footwear, furniture and coatings, construction products, adhesives, sealants and elastomers industries.

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We provide a wide variety of polyurethane solutions as components (i.e., the isocyanate or the polyol) or in the form of "systems" in which we provide the total isocyanate and polyol formulation to our customers in ready-to-use form. Our ability to deliver a range of polyurethane solutions and technical support tailored to meet our customers' needs is critical to our long-term success. We have strategically located our polyurethane formulation facilities, commonly referred to in the chemicals industry as "systems houses," close to our customers, enabling us to focus on customer support and technical service. We believe this customer support and technical service system contributes to customer retention and also provides opportunities for identifying further product and service needs of customers. We manufacture polyols primarily to support our MDI customers' requirements.

We believe that the extensive market knowledge and industry experience of our sales teams and technical experts, in combination with our strong emphasis on customer relationships, have facilitated our ability to establish and maintain long-term customer supply positions. Our strategy is to continue to increase sales to existing customers and to attract new customers by providing innovative solutions, quality products, reliable supply, competitive prices and superior customer service.

## Manufacturing and Operations

Our MDI production facilities are located in Geismar, Louisiana; Rozenburg, The Netherlands; and through our joint ventures in Caojing, China. These facilities receive aniline, which is a primary material used in the production of MDI, from our facilities located in Geismar, Louisiana; Wilton, U.K.; and Caojing, China. We believe that this relative scale and product integration of our large facilities provide a significant competitive advantage over other producers. In addition to reducing transportation costs for our raw materials, integration helps reduce our exposure to cyclical prices.

The following table sets forth the annual production capacity of polyurethane chemicals at each of our polyurethanes facilities:

	MDI	Polyols	TPU	Aniline	Nitrobenzene	PO	PG	MTBE (millions of
	(millions of pounds)						gallons)	
Geismar, Louisiana	990	160		715(	2) 953(2	2)		
Osnabrück, Germany		26	59					
Port Neches, Texas						525	145	260
Ringwood, Illinois			20					
Caojing, China	330(1)							
Rozenburg, The								
Netherlands	880	130						
Wilton, U.K.				715	953			
Total	2,200	316	79	1,430	1,906	525	145	260

(1) Represents our 50% share of capacity from SLIC, an unconsolidated Chinese joint venture.

(2) Represents our approximately 78% share of capacity under our consolidated Rubicon LLC manufacturing joint venture with Chemtura Corporation.

At both our Geismar and Rozenburg facilities we utilize sophisticated proprietary technology to produce our MDI. This technology, which is also used in our Chinese joint venture, contributes to our position as a low cost MDI producer. In addition to MDI, we use a proprietary manufacturing process to manufacture PO. We own or license all technology and know-how developed and utilized at our PO facility. Our process combines isobutane and oxygen in proprietary oxidation (peroxidation) reactors, thereby forming TBHP and TBA, which are further processed into PO and MTBE, respectively. Because our PO production process is less expensive relative to other technologies and allows all of our

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PO co-products to be processed into saleable or useable materials, we believe that our PO production technology possesses several distinct advantages over its alternatives.

We operate polyurethane systems houses in Buenos Aires, Argentina; Deer Park, Australia; Taboão da Serra, Brazil; Shanghai, China; Cartagena, Colombia; Deggendorf, Germany; Osnabrück, Germany; Pune, India; Gandaria, Jakarta, Indonesia; Ternate, Italy; Tlalnepantla, Mexico; Mississauga, Ontario; Obninsk, Russia; Dammam, Saudi Arabia; Kuan Yin, Taiwan; Samutprakarn, Thailand; and Istanbul, Turkey.

In July 2012, we completed our acquisition of the remaining 55% ownership interest in International Polyurethane Investments B.V. (the "Russian Systems House Acquisition"). This company's wholly-owned subsidiary, Huntsman NMG ZAO, is a leading supplier of polyurethane systems to the adhesives, coatings and footwear markets in Russia, Ukraine and Belarus and is headquartered in Obninsk, Russia.

#### Joint Ventures

Rubicon Joint Venture. Chemtura Corporation is our joint venture partner in Rubicon LLC, which owns aniline, nitrobenzene and DPA manufacturing facilities in Geismar, Louisiana. We are entitled to approximately 78% of the nitrobenzene and aniline production capacity of Rubicon LLC, and Chemtura Corporation is entitled to 100% of the DPA production. In addition to operating the joint venture's aniline, nitrobenzene and DPA facilities, Rubicon LLC also operates our wholly owned MDI, polyol and Maleic Anhydride facilities at Geismar and is responsible for providing other auxiliary services to the entire Geismar complex. As a result of this joint venture, we are able to achieve greater scale and lower costs for our products than we would otherwise have been able to obtain. Rubicon LLC is consolidated in our financial statements.

Chinese MDI Joint Ventures. We are involved in two related joint ventures which operate MDI production facilities near Shanghai, China. SLIC, our manufacturing joint venture with BASF and three Chinese chemical companies, produces MNB, aniline and crude MDI. We effectively own 35% of SLIC and account for our investment under the equity method. HPS, our splitting joint venture with Shanghai Chlor-Alkali Chemical Company, Ltd, manufactures pure MDI, polymeric MDI and MDI variants. We own 70% of HPS and it is a consolidated affiliate. These projects have been funded by a combination of equity invested by the joint venture partners and borrowed funds. The total production capacity of the SLIC facilities is 660 million pounds per year of MDI and the splitting capacity of the HPS facility is 339 million pounds per year of MDI.

Chinese PO/MTBE Joint Venture. On November 13, 2012, we entered into an agreement to form a joint venture with Sinopec. The joint venture will involve the construction and operation of a PO/MTBE facility in China. Under the joint venture agreement, we will have a 49% interest in the joint venture and Sinopec will hold a 51% interest. Our equity investment is anticipated to be approximately \$120 million, and we expect to receive significant license fees from the joint venture. The timing of equity contributions and license fee payments depends on various factors, but the majority are intended to be made over the course of the construction period of the plant (expected to be completed by the end of 2014).

## Raw Materials

The primary raw materials for MDI-based polyurethane chemicals are benzene and PO. Benzene is a widely available commodity that is the primary feedstock for the production of MDI and aniline. Historically, benzene has been the largest component of our raw material costs. We purchase benzene from third parties to manufacture nitrobenzene and aniline, almost all of which we then use to produce MDI.

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A major cost in the production of polyols is attributable to the costs of PO. The integration of our PO business with our polyurethane chemicals business gives us access to a competitively priced, strategic source of PO and the opportunity to develop polyols that enhance our range of MDI products. The primary raw materials used in our PO production process are butane/isobutane, propylene, methanol and oxygen. We purchase a large portion of our raw materials under long-term contracts.

## Competition

Our major competitors in the polyurethane chemicals market include BASF, Bayer, Dow, Yantai Wanhua and LyondellBasell. While these competitors and others produce various types and quantities of polyurethane chemicals, we focus on MDI and MDI-based polyurethane systems. Our polyurethane chemicals business competes in two basic ways: (1) where price is the dominant element of competition, our polyurethane chemicals business differentiates itself by its high level of customer support, including cooperation on technical and safety matters; and (2) elsewhere, we compete on the basis of product performance and our ability to react quickly to changing customer needs and by providing customers with innovative solutions to their needs.

Some of our competitors in the Polyurethanes segment are among the world's largest chemical companies and major integrated petroleum companies. These competitors may have their own raw material resources. Some of these companies may be able to produce products more economically than we can. In addition, some of our competitors have greater financial resources, which may enable them to invest significant capital into their businesses, including expenditures for research and development. If any of our current or future competitors develop proprietary technology that enables them to produce products at a significantly lower cost, our technology could be rendered uneconomical or obsolete.

#### **Performance Products**

#### General

Our Performance Products segment has leading positions in the manufacture and sale of amines, surfactants and maleic anhydride and serves a wide variety of consumer and industrial end markets. We are organized by strategic business units ("SBUs") which differentiate between specialties and intermediates.

In our specialty SBUs (energy, materials, additives, processing chemicals and agrochemicals) we are a leading global producer of amines, carbonates, maleic anhydride and specialty surfactants. Growth in demand in our specialty markets tends to be driven by the end-performance characteristics that our products deliver to our customers. These products are manufactured for use in a growing number of niche industrial end uses and have been characteriz