

AIR PRODUCTS & CHEMICALS INC /DE/

Form S-3ASR

November 22, 2017

Table of Contents

As filed with the Securities and Exchange Commission on November 22, 2017

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

AIR PRODUCTS AND CHEMICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of

Incorporation or Organization)

7201 Hamilton Boulevard

23-1274455
(I.R.S. Employer

Identification Number)

Allentown, Pennsylvania 18195-1501

Telephone: (610) 481-4911

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Mary T. Afflerbach

Corporate Secretary and Chief Governance Officer

Air Products and Chemicals, Inc.

7201 Hamilton Boulevard

Allentown, Pennsylvania 18195-1501

Telephone: (610) 481-4911

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Approximate date of commencement of proposed sale to public: From time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 (the Securities Act), other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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, smaller reporting company and emerging growth company in Rule 12b-2 of the Exchange Act (Check one):

Large accelerated filer		Accelerated filer
Non-accelerated filer	(Do not check if a smaller reporting company)	Smaller reporting company
		Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act.

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered/Proposed maximum offering price per unit/Proposed maximum aggregate offering price/Amount of registration fee (1) (2) (3)
Senior Debt Securities	
Preferred Stock	
Depositary Shares	
Common Stock	
Warrants	

- (1) An indeterminate aggregate initial offering price or number of the securities of each identified class is being registered as may from time to time be issued at indeterminate prices. Separate consideration may or may not be received for securities that are issuable on exercise, conversion or exchange of other securities.
- (2) In accordance with Rules 456(b) and 457(r), the registrant is deferring payment of all registration fees.
- (3) Any securities registered hereunder may be sold separately or as units with other securities registered hereunder.

Table of Contents

Prospectus

AIR PRODUCTS AND CHEMICALS, INC.

SENIOR DEBT SECURITIES

PREFERRED STOCK

DEPOSITARY SHARES

COMMON STOCK

WARRANTS

Investing in these securities involves risks. You should carefully consider the risk factors incorporated herein by reference and described under the heading Risk Factors beginning on page 3.

We may offer, issue and sell these securities, together or separately, from time to time, in one or more offerings. This prospectus describes some of the general terms that may apply to the offered securities. The specific prices and terms of any securities to be offered will be described in supplements to this prospectus, which may also add, update or change information contained in this prospectus. You should read this prospectus and any applicable prospectus supplement carefully before you make your investment decision.

We may offer and sell these securities to or through one or more underwriters, dealers and agents, or directly to purchasers, on a continuous or delayed basis. If required, the prospectus supplement for each offering of securities will describe the plan of distribution for that offering. For general information about the distribution of securities offered, please see Plan of Distribution in this prospectus.

Our common stock is listed on the New York Stock Exchange under the symbol APD. If we decide to seek a listing of any other securities offered by this prospectus, the applicable prospectus supplement will disclose the exchange or market on which such securities will be listed or where we have made an application for listing, as the case may be.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ACCURACY OR ADEQUACY OF THE DISCLOSURES IN THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is November 22, 2017

Table of Contents

TABLE OF CONTENTS

<u>ABOUT THIS PROSPECTUS</u>	1
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	1
<u>CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	2
<u>THE COMPANY</u>	3
<u>RISK FACTORS</u>	3
<u>RATIOS OF EARNINGS TO FIXED CHARGES</u>	3
<u>USE OF PROCEEDS</u>	3
<u>DESCRIPTION OF SENIOR DEBT SECURITIES</u>	4
<u>DESCRIPTION OF PREFERRED STOCK</u>	10
<u>DESCRIPTION OF DEPOSITARY SHARES</u>	11
<u>DESCRIPTION OF COMMON STOCK</u>	13
<u>DESCRIPTION OF WARRANTS</u>	14
<u>PLAN OF DISTRIBUTION</u>	16
<u>LEGAL OPINIONS</u>	16
<u>EXPERTS</u>	16

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of an automatic shelf registration statement that we have filed with the Securities and Exchange Commission (the SEC or the Commission) as a well-known seasoned issuer as defined in Rule 405 under the Securities Act of 1933, as amended (the Securities Act), using a shelf registration process. Under this process, we may sell from time to time any combination of the securities described in this prospectus. This prospectus only provides you with a general description of the securities that we may offer. Each time we sell securities, we will provide a supplement to this prospectus that contains specific information about the terms of that offering, including the specific amounts, prices and terms of the securities offered. The prospectus supplement may also add, update or change information contained in this prospectus. You should carefully read both this prospectus, any accompanying prospectus supplement and any free writing prospectus prepared by or on behalf of us, together with the additional information described under the heading **Where You Can Find More Information**.

You should rely only on the information incorporated by reference or provided in this prospectus, any accompanying prospectus supplement and any free writing prospectus prepared by or on behalf of us. We have not authorized anyone to provide you with different information. We are not making offers to sell the securities in any jurisdiction in which an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation.

You should assume that the information in this prospectus or any prospectus supplement or free writing prospectus, as well as the information incorporated by reference herein or therein, is accurate only as of the date of the documents containing the information. Our business, financial condition, results of operations and prospects may have changed since those dates.

As used in this prospectus, unless the context indicates otherwise, the Company, we, us and our refer to Air Products and Chemicals, Inc.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC under the Securities Exchange Act of 1934, as amended (the Exchange Act). You may read and copy any document we file at the SEC's Public Reference Room, 450 Fifth Street, N.W., Washington, D.C. 20549. You may call the SEC at 1-800-SEC-0330 for further information on the SEC's Public Reference Room. You may also access our SEC filings at the SEC's web site at <http://www.sec.gov>.

The SEC allows us to incorporate by reference into this prospectus and any accompanying prospectus supplement the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus and any accompanying prospectus supplement, except for any information superseded by information contained directly in this prospectus, any accompanying prospectus supplement, any subsequently filed document deemed incorporated by reference or any free writing prospectus prepared by or on behalf of us. We incorporate by reference the documents listed below and their amendments (except information furnished under Item 2.02 or Item 7.01 of Form 8-K, which is neither deemed filed nor incorporated by reference) and any future filings made with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act until the offering is completed or terminated:

Edgar Filing: AIR PRODUCTS & CHEMICALS INC /DE/ - Form S-3ASR

Our Annual Report on Form 10-K for the fiscal year ended September 30, 2017, filed with the SEC on November 16, 2017;

Our Current Reports on Form 8-K dated November 14, 2017;

The information specifically incorporated by reference into our Annual Report on Form 10-K for the fiscal year ended September 30, 2016 from our definitive proxy statement on Schedule 14A, filed with the SEC on December 14, 2016; and

The description of our common stock in Exhibit 99.1 to our Annual Report on Form 10-K for the fiscal year ended September 30, 2014, filed with the SEC on November 24, 2014, and any amendment or report filed for the purpose of updating such description.

You may request a copy of these filings at no cost, by writing to or telephoning us at:

Corporate Secretary's Office

Air Products and Chemicals, Inc.

7201 Hamilton Boulevard

Allentown, Pennsylvania 18195-1501

Telephone: (610) 481-4911

Table of Contents

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and any accompanying prospectus supplement contains or incorporates by reference forward-looking statements within the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, including statements about business outlook. These forward-looking statements are based on management's reasonable expectations and assumptions as of the date of the statement. Actual performance and financial results may differ materially from projections and estimates expressed in the forward-looking statements because of many factors not anticipated by management, including, without limitation, the risks described in this prospectus, any accompanying prospectus supplement and any documents incorporated by reference, including the Risk Factors sections of this prospectus, any accompanying prospectus supplement and our reports and other documents filed with the SEC. You are cautioned not to place undue reliance on any forward-looking statements made by us or on our behalf. Please take into account that forward-looking statements speak only as of the date of this prospectus or, in the case of any accompanying prospectus supplement or documents incorporated by reference, the date of any such document. We disclaim any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements contained or incorporated by reference in this prospectus or any accompany prospectus supplement to reflect any change in our assumptions, beliefs or expectations or any change in events, conditions, or circumstances upon which any such forward-looking statements are based, except as required by law.

Table of Contents

THE COMPANY

Air Products and Chemicals, Inc., a Delaware corporation originally founded in 1940, serves energy, electronics, chemicals, metals, and manufacturing customers globally with a unique portfolio of products, services, and solutions that include atmospheric gases, process and specialty gases, equipment, and services. We are the world's largest supplier of hydrogen and have built leading positions in growth markets such as helium and natural gas liquefaction.

Our principal executive office is located at 7201 Hamilton Boulevard, Allentown, Pennsylvania 18195-1501 and our telephone number is (610) 481-4911. We maintain a website at www.airproducts.com. The information on our website is not incorporated by reference in this prospectus or any accompanying prospectus supplement, and you should not consider it a part of this prospectus or any accompanying prospectus supplement.

RISK FACTORS

Investing in our securities involves risk. See the risk factors described in our most recent Annual Report on Form 10-K (together with any material changes thereto contained in subsequently filed Quarterly Reports on Form 10-Q) and those contained in our other filings with the SEC that are incorporated by reference in this prospectus and any accompanying prospectus supplement. Before making an investment decision, you should carefully consider these risks as well as other information we include or incorporate by reference in this prospectus and any accompanying prospectus supplement. These risks could materially affect our business, financial condition or results of operations and cause the value of our securities to decline. You could lose all or part of your investment.

RATIOS OF EARNINGS TO FIXED CHARGES

	Year Ended September 30,				
	2017	2016	2015	2014	2013
Ratio of earnings to fixed charges	9.7	10.1	7.7	5.8	6.9

The ratio of earnings to fixed charges is determined by dividing earnings, as adjusted, which includes income from continuing operations before taxes, fixed charges (excluding capitalized interest), capitalized interest amortized during the period, undistributed earnings of less-than-fifty percent-owned affiliates and noncontrolling interest in pre-tax income of subsidiaries that have not incurred fixed charges, by fixed charges. Fixed charges consist of interest on all indebtedness plus that portion of operating lease rentals representative of the interest factor (deemed to be 21% of operating lease rentals).

USE OF PROCEEDS

Unless otherwise specified in the applicable prospectus supplement, the net proceeds we receive from the sale of the securities offered by this prospectus and the accompanying prospectus supplement will be used for general corporate purposes. General corporate purposes may include repayment or refinancing of debt, including repayment of commercial paper, investments in or extensions of credit to our subsidiaries, redemption of common stock or preferred stock and the financing of possible acquisitions or business expansion. Pending any specific application, we may initially invest funds in short-term marketable securities or apply them to the reduction of short-term indebtedness.

Table of Contents

DESCRIPTION OF SENIOR DEBT SECURITIES

The following description of the terms of the debt securities sets forth general terms that may apply to the debt securities. The particular terms of any debt securities will be described in the prospectus supplement relating to those debt securities.

The debt securities will be our senior debt securities. The debt securities will be issued under an indenture to be entered into between us and The Bank of New York Mellon Trust Company, N.A., as trustee (the Indenture). The Indenture is subject to and governed by the Trust Indenture Act of 1939, as amended.

The following is a summary of the most important provisions of the Indenture. A copy of the form of the Indenture is an exhibit to the registration statement of which this prospectus is a part. Section references below are to the section in the Indenture. The referenced sections of the Indenture are incorporated by reference.

General

The Indenture does not limit the amount of debt securities that we may issue. The Indenture provides that debt securities may be issued up to the principal amount authorized by us from time to time. The debt securities will be unsecured and will have the same rank as all of our other unsecured and unsubordinated debt, unless otherwise set forth in the specific terms of a series of debt securities issued under the Indenture.

The debt securities may be issued in one or more separate series. The prospectus supplement relating to the particular series of debt securities being offered will specify the particular amounts, prices and terms of those debt securities. These terms may include:

the title of the debt securities;

any limit upon the aggregate principal amount issued;

the maturity date or dates, or the method of determining the maturity dates;

the interest rate or rates, the method of determining those rates, and the form of interest payments, including cash or payment-in-kind;

the interest payment dates and the regular record dates and the right, if any, to extend or defer interest payments;

the places where payments may be made and where securities may be presented for transfer;

any mandatory or optional redemption provisions;

any sinking fund or analogous provisions;

the portion of principal amount of the debt security payable upon acceleration of maturity if other than the full principal amount;

any deletions of, or changes or additions to, the events of default, covenants, satisfaction and discharge or amendment provisions;

the form of the debt securities, including denomination and any required legends, and any transfer restrictions thereon;

if other than U.S. dollars, the currency or currencies in which payments on the debt securities will be payable and any applicable exchange rates or method of calculating such exchange rates and whether we or a holder may elect payment to be made in a different currency;

the method of determining the amount of any payments on the debt securities which are linked to an index;

whether the debt securities will be issued in the form of one or more global securities in temporary or definitive form;

any terms relating to the delivery of the debt securities if they are to be issued upon the exercise of warrants;

whether and on what terms we will pay additional amounts to holders of the debt securities that are not U.S. persons in respect of any tax, assessment or governmental charge withheld or deducted and, if so, whether and on what terms we will have the option to redeem the debt securities rather than pay the additional amounts;

any conversion or exchange provisions;

any guarantees or subordination provisions;

Table of Contents

any terms for the attachment to the debt securities of warrants, options or other rights to purchase or sell our securities;

any special United States Federal income tax or other considerations with respect to the debt securities;

the trustee, paying agent and other agents for the securities and rights and obligations thereof; and

any other specific terms of the debt securities.

(Section 2.3)

Unless otherwise specified in the prospectus supplement, debt securities denominated in U.S. dollars will be issued in denominations of \$2,000 or an integral multiple of \$1,000. (Section 2.7)

We may issue some of the debt securities as original issue discount debt securities. Original issue discount securities bear no interest or bear interest at below-market rates and will be sold at a discount below their stated principal amount.

Certain Covenants of the Company

Limitation on Liens Subject to the exceptions set forth below under Exempted Indebtedness, we covenant that we will not create or assume, nor will we permit any Restricted Subsidiary (as hereinafter defined) to create or assume, any

mortgage

security interest,

pledge, or

lien

(together, we refer to these transactions as liens) of or upon any Principal Property (as defined below) or shares of capital stock or indebtedness of any Restricted Subsidiary, whether owned at the date of the Indenture or thereafter acquired, in each case securing any new Debt (as hereinafter defined) incurred or guaranteed by us or any Restricted Subsidiary, without equally and ratably securing the outstanding debt securities for so long as such other Debt is secured. This restriction will not apply to certain permitted liens, including the following:

- (i) liens on any Principal Property (including any underlying real estate) acquired, repaired, constructed or improved by us or any Restricted Subsidiary which are created or assumed prior to, contemporaneously with, or within 180 days after (or in the case of any such Principal Property

which is being financed on the basis of long-term contracts or similar financing arrangements for which a firm commitment is made by one or more banks, insurance companies or other lenders or investors (not including us or any Restricted Subsidiary), then within 360 days after), the completion of such acquisition, repair, construction or improvement of such Principal Property to secure or provide for the payment of any part of the purchase price and other acquisition costs of such property or the cost of such repair, construction or improvement, or liens on any Principal Property at the time of acquisition thereof (including by means of a merger or consolidation);

- (ii) liens on property or shares of capital stock or indebtedness of a person existing at the time such person is merged into or consolidated with us or a Restricted Subsidiary or at the time of a sale, lease or other disposition of the properties of a person as an entirety or substantially as an entirety to us or a Restricted Subsidiary;
- (iii) liens existing on the date of this Indenture or liens on property or shares of capital stock or indebtedness of a person existing at the time such person becomes a Restricted Subsidiary;
- (iv) liens in favor of us or any Restricted Subsidiary or liens to secure Debt of a Restricted Subsidiary to us or to another Restricted Subsidiary, but only so long as such indebtedness is held by us or a Restricted Subsidiary;
- (v) liens in favor of the United States of America or any State or territory thereof (including the District of Columbia) or any foreign jurisdiction, or any department, agency or political subdivision of the United States of America or any State or territory thereof (including the District of Columbia) or any foreign jurisdiction, to secure partial, progress, advance or other payments pursuant to any contract, statute or regulation, including, without limitation, liens to secure indebtedness of the pollution control or industrial revenue bond type, or to secure any indebtedness incurred for the purpose of financing all or any part of the purchase price and other acquisition costs or the cost of constructing or improving the property subject to such liens;

Table of Contents

- (vi) liens in favor of any customer arising in respect of partial, progress, advance or other payments made by or on behalf of such customer for goods produced for or services rendered to such customer in the ordinary course of business not exceeding the amount of such payments;
- (vii) liens for the sole purpose of extending, renewing or replacing (including successive extensions, renewals or replacements), in whole or in part any lien referred to in the foregoing clauses (i) to (vi), or in this clause (vii), including any lien created prior to and existing on the date of the Indenture, provided that the principal amount of Debt secured thereby shall not exceed the principal amount of Debt so secured at the time of such extension, renewal or replacement (plus an amount in respect of fees, costs and expenses, including premiums and accrued and unpaid interest in relation to any refinancing, refunding, extension, renewal or replacement of such Debt), and that such extension, renewal or replacement shall be limited to all or a part of the property subject to the lien so extended, renewed or replaced (plus improvements on such property);
- (viii) certain statutory liens, liens for taxes and certain other liens; and
- (ix) liens in respect of a sale and lease-back transaction permitted pursuant to *Limitations on Sale and Lease-Back Transactions* set forth below.

Any lien created for the benefit of the holders of the debt securities of any series pursuant to this covenant will be deemed automatically and unconditionally released and discharged upon the release and discharge of the applicable lien described in the first paragraph of this covenant without any further action on the part of the holders or us or any Restricted Subsidiaries. (Section 3.6)

Limitations on Sale and Lease-Back Transactions Subject to the exceptions set forth below under *Exempted Indebtedness*, sale and lease-back transactions by us or any Restricted Subsidiary of any Principal Property which has been owned and operated by us or a Restricted Subsidiary for more than 120 days are prohibited unless

- (i) we or such Restricted Subsidiary would be entitled to incur Debt secured by a lien on the property involved in a principal amount at least equal to the *Attributable Debt* (as hereinafter defined) of any such sale and lease-back transaction without equally and ratably securing the debt securities;
- (ii) an amount equal to the *Attributable Debt* (as hereinafter defined) of any such sale and lease-back transaction is applied to the acquisition of additional Principal Property of equal or greater fair market value (as determined in good faith by us or such Restricted Subsidiary) or the retirement of indebtedness for borrowed money (excluding indebtedness under a revolving loan facility, unless the commitment is reduced by the amount of such payment), including the debt securities, incurred or assumed by us or any Restricted Subsidiary (other than indebtedness for borrowed money (excluding indebtedness under a revolving loan facility, unless the commitment is reduced by the receipt of such payment), owed to us or any Restricted Subsidiary) which by its terms matures on, or is extendable or renewable at the option of the obligor to, a date more than twelve months after the date of the creation of such indebtedness; provided, however, that the amount to be applied to the retirement of indebtedness pursuant to this clause (ii) shall be reduced by (A) the aggregate principal

amount of any debt securities delivered to the Trustee for retirement within 180 days of the effective date of such sale and lease-back transaction and (B) the aggregate principal amount of such indebtedness (other than the debt securities) retired by us or a Restricted Subsidiary within 180 days of the effective date of such sale and lease-back transaction;

(iii) the lease involved is for a term (including renewals) of not more than three years (or which may be terminated by us or the applicable Restricted Subsidiary within a period of not more than three years);

(iv) the lease involved is between us and a Restricted Subsidiary or between Restricted Subsidiary; or

(v) such sale and lease-back transaction was entered into prior to the date of this Indenture.

(Section 3.7)

Exempted Indebtedness Either we or a Restricted Subsidiary may create or assume liens and enter into sale and lease-back transactions, notwithstanding the limitations outlined above, provided that at the time thereof and after giving effect thereto the aggregate amount of Debt secured by all such liens (other than such liens described in clauses (i) to (ix) in *Limitation on Liens* described above) and *Attributable Debt* of all such sale and lease-back transactions outstanding or to be entered into (other than any sale and lease-back transactions permitted by *Limitations on Sale and Lease-Back Transactions* described above) shall not exceed 15% of Consolidated Net Tangible Assets (as hereinafter defined). (Section 3.8)

Table of Contents

Certain Definitions

The term **Restricted Subsidiary** means any Subsidiary

- (a) substantially all the property of which is located, or substantially all the business of which is carried on, within the United States of America and
- (b) which owns or leases a Principal Property.

The term **Principal Property** means any manufacturing plant, research facility or warehouse owned by us or any of our subsidiaries which is located within the United States and has a net book value exceeding the greater of \$50,000,000 and 3% of the total assets of our company and our consolidated subsidiaries, as shown on our most recent audited consolidated balance sheet, excluding any property which the board of directors by resolution declares is not of material importance to our total business as consolidated with the business of our subsidiaries.

The term **Attributable Debt** in respect of a sale and lease-back transaction means, as to any particular lease under which any person is at the time liable, at any date as of which the amount thereof is to be determined, the total net amount of rent required to be paid by such person under such lease during the remaining term thereof, excluding renewals, discounted at the rate of interest implicit in the terms of such lease (as determined in good faith by us). If and to the extent the amount of any lease payment during any future period is not definitely determinable under the lease in question, the amount of such lease-payment will be estimated in such reasonable manner as we may in good faith determine. The net amount of rent required to be paid under any such lease for any such period shall be the amount of the rent payable by the lessee with respect to such period, after excluding amounts required to be paid, whether or not designated as rent or additional rent, on account of maintenance and repairs, insurance, taxes, assessments, water rates or similar charges and any amounts required to be paid by such lessee contingent upon the amount of sales, maintenance and repairs, insurance, taxes, assessments, water rates or similar charges. In the case of any lease which is terminable by the lessee upon the payment of a penalty, such net amount may, if we so elect, also include the amount of such penalty, in which case no rent shall be considered as required to be paid under such lease subsequent to the first date upon which it may be so terminated.

The term **Consolidated Net Tangible Assets** means, as of any date of determination, the total amount of all assets appearing on our most recently available consolidated balance sheet preceding the date of determination prepared in accordance with generally accepted accounting principles in effect in the United States (after deducting related depreciation, depletion, amortization and all other valuation reserves which, in accordance with generally accepted accounting principles in effect in the United States, are set aside in connection with the business conducted), less Consolidated Current Liabilities and goodwill, trademarks, patents, unamortized debt discount and all other like segregated intangible assets properly classified as intangible assets under generally accepted accounting principles in effect in the United States, all as determined in accordance with generally accepted accounting principles in effect in the United States; provided, that Consolidated Net Tangible Assets shall be calculated after giving pro forma effect to any investments, acquisitions or dispositions occurring outside the ordinary course of business and subsequent to the date of such balance sheet, as well as any transaction giving rise to the need to calculate Consolidated Net Tangible Assets (including the application of the proceeds therefrom, as applicable).

The term **Consolidated Current Liabilities** means, as of any date of determination, the aggregate of the current liabilities of us and our consolidated Subsidiaries appearing on our most recently available consolidated balance sheet preceding the date of determination, prepared in accordance with generally accepted accounting principles in effect in

the United States, excluding the amount of those liabilities which are by their terms extendable or renewable at the option of the obligor to a date more than 12 months after the date as of which the amount is being determined.

The term Debt means indebtedness, other than indebtedness among us and our Restricted Subsidiaries, for money borrowed by us or a Restricted Subsidiary which in accordance with generally accepted accounting principles in effect in the United States would be reflected on the balance sheet of us or such Restricted Subsidiary, as applicable, as a liability as of the date on which the Debt is to be determined; provided that if any amount of indebtedness among us and our Restricted Subsidiaries for money borrowed is transferred to any person other than us or a Restricted Subsidiary, then such indebtedness shall be deemed to be Debt issued on the date of transfer.

(Section 1.1)

Other than the restrictions on liens and sale and lease-back transactions described above, neither the Indenture nor the debt securities afford you protection in the event of a highly leveraged transaction involving us or any of our subsidiaries, including any takeover, recapitalization or other restructuring that may result in a sudden and significant decline in credit rating.

Table of Contents

Events of Default, Waiver and Notice

As to any series of securities, an event of default is defined in the Indenture as being any of the following events:

- (i) default for 30 days in the payment of any interest on the securities of such series;
- (ii) default in the payment of principal or premium due on the securities of any series (other than pursuant to a sinking fund);
- (iii) default for 30 days in the payment of any sinking fund installment on the securities of such series, when due;
- (iv) our default for 90 days in the performance of any other of the covenants or agreements in the Indenture (other than those set forth exclusively in the terms of any other series of securities);
- (v) certain events of bankruptcy, insolvency and reorganization of our company; or
- (vi) any other events as may be established in any applicable supplement.

(Section 5.1)

No event of default with respect to any particular series of securities necessarily constitutes an event of default with respect to any other series of securities.

The trustee must give notice of a default of which it has received written notice to the holders of the series of debt securities on which the default exists within 90 days unless the default is cured or waived. However, the trustee may withhold this notice if the trustee considers it in the interest of the holders of securities of such series to do so. The trustee may not withhold notice in the event of a payment default with regard to principal, interest or a sinking fund. (Section 5.11)

If an event of default has occurred and is continuing:

and the event of default is as described in clause (i), (ii), (iii), (iv) or (vi) above, either the trustee or the holders of 25% in principal amount of the securities of such series then outstanding may declare the principal (or, in the case of discounted securities, the amount specified in the terms thereof) of all such securities to be due and payable immediately.

and the event of default is as described in clause (v) above, the principal (or, in the case of discounted securities, the amount specified in the terms thereof) of all securities then outstanding shall

automatically, and without any acceleration or any other action on the part of the trustee or any holder, become due and payable immediately.

However, upon certain conditions, past defaults of the type described in clause (i), (ii), (iii) or (vi) above may be waived by the holders of a majority in principal amount of the affected securities then outstanding (or in the case of past defaults on the type described in clause (iv) or (v) above, by the holders of a majority in principal amount of all securities then outstanding), except for defaults in

the payment of principal of, or any premium or interest on, such securities or

with respect to any covenant or provision which may not be amended without the approval of each holder affected.

(Sections 5.1 and 5.10)

The holders of a majority in principal amount of the securities of each series affected, voting as a separate class, may direct the time, method and place of conducting any proceeding for any remedy available to the trustee under the Indenture, subject to certain limitations specified in the Indenture, provided that the holders of securities shall have offered to the trustee reasonable indemnity against costs, expenses and liabilities. (Sections 5.9 and 6.2(d)) We must certify to the trustee on a yearly basis as to the absence of certain defaults. (Section 3.5)

Modification of the Indenture

Together with the trustee, and subject to the consent of the holders of at least a majority of the outstanding principal amount of the outstanding debt securities of all affected series (voting separately), we may modify the Indenture or any supplement to the Indenture. Without the consent of each affected holder, we may not:

- (i) extend the final maturity of any security;

Table of Contents

- (ii) reduce the principal amount or rate of interest of any security;
 - (iii) extend the time of payment of interest of any security;
 - (iv) reduce the amount payable upon the redemption of any security;
 - (v) reduce the amount of the principal of a discounted security payable upon acceleration of the maturity of the security or in the event of bankruptcy;
 - (vi) impair the right to institute suit to enforce payment or repayment; or
 - (vii) change the provisions in the indenture that relate to its modification or amendment.
- (Section 8.2)

Notwithstanding the above, we may modify the Indenture or any supplement to the indenture without the consent of any holder to, among others:

- (i) provide for uncertificated debt securities in addition to certificated debt securities;
- (ii) evidence the succession of another entity to us, or successive successions, in compliance with the terms of the Indenture;
- (iii) cure any ambiguity or inconsistency or to correct or supplement any provision which may be defective or inconsistent with any other provision and to conform the terms to the description of such terms in the applicable offering memorandum, prospectus supplement or other offering document for such debt securities at the time of initial sale thereof;
- (iv) establish the form or terms of debt securities as permitted by the Indenture and to authorize the issuance of additional debt securities of a series previously authorized;
- (v) evidence and provide for the acceptance of appointment of a successor trustee;
- (vi) add to or change or eliminate any provision as shall be necessary or desirable to in accordance with any amendment to the Trust Indenture Act of 1939;

- (vii) add guarantors or co-obligors with respect to any series of debt securities and to release guarantors from their guarantees of debt securities in accordance with their terms; or
- (viii) make any change in any series of debt securities that do not adversely affect in any material respect the rights of the holders of such debt securities.

Concerning the Trustee

Affiliates of The Bank of New York Mellon Trust Company, N.A., the trustee under the Indenture, also performs certain cash management services for, and has provided in the past, and may provide in the future, certain credit facilities to, us in the normal course of business.

Defeasance of the Indenture and Securities

We may, at any time, satisfy our obligations with respect to any payments of principal, premium or interest of any security or securities of any series by depositing in trust with the trustee:

- (a) money (in the currency in which the securities are payable),
- (b) in the case of securities denominated in U.S. dollars, U.S. Government Obligations (as defined in the Indenture), or a combination of U.S. Government Obligations and money, or
- (c) in the case of securities denominated in a foreign currency, Foreign Government Securities (as defined in the Indenture) or a combination of Foreign Government Securities and money.

Table of Contents

If the deposit is sufficient to make all payments of interest, principal and premium when due, our obligations with respect to such securities will be discharged and terminated (except as to certain of our obligations to the trustee), and you will be able to look only to the trust fund for any payment of principal, premium and interest on securities of such series until maturity or redemption. (Article Ten)

Under United States Federal income tax law, any deposit as described just above is viewed as a taxable exchange of the securities deposited in the trust for interests in, or for an instrument representing indebtedness of, the trust. Accordingly, at such time as we may elect to deposit securities in a trust as described above, you would be required to recognize taxable gain or loss as if the securities had been sold for an amount equal to the sum of the amount of money and the fair market value of the securities held in the trust (or, alternatively, the value of the instrument). You then may be required to include in taxable income your share of the income, gain and loss of the trust.

Alternatively, the trust might be considered a separate taxable entity, in which case you might also be taxable on original issue discount as well as interest on the instrument. You should consult your own advisors with respect to the more detailed tax consequences of such deposit and discharge, including possible liabilities with regard to tax laws other than United States Federal income tax law.

Global Securities

We may issue the debt securities of a series in whole or in part in the form of one or more global certificates that will be deposited with a depository we will identify in a prospectus supplement. We will describe the specific terms of the depository arrangement with respect to a series of debt securities in the accompanying prospectus supplement.

Upon the issuance of a global security, the depository will credit, on its book-entry registration and transfer system, the respective principal amounts of that global security to the accounts of participants in the depository. Ownership of beneficial interests in a global security will be limited to participants or persons that hold interests through participants.

So long as the depository for a global security, or its nominee, is the registered owner of the global security, the depository or its nominee, as the case may be, will be considered the sole owner or holder of the securities represented by that global security. Except as provided in the Indenture, owners of beneficial interests in securities represented by a global security will not

- (a) be entitled to have such securities registered in their names,
- (b) receive or be entitled to receive physical delivery of certificates representing such securities in definitive form,
- (c) be considered the owners or holders thereof under the Indenture or
- (d) have any rights under the Indenture.

We may, in our sole discretion, at any time determine that any series of securities issued or issuable in the form of a global security shall no longer be represented by such global security and such global security shall be exchanged for

securities in definitive form pursuant to the Indenture. (Section 2.14)

Table of Contents

DESCRIPTION OF PREFERRED STOCK

Preferred Stock

The following is a description of general terms and provisions of the preferred stock. The particular terms of any series of preferred stock will be described in the applicable prospectus supplement.

All of the terms of the preferred stock are, or will be, contained in our Restated Certificate of Incorporation, as amended, and the certificate of amendment relating to each series of the preferred stock, which will be filed with the SEC at or prior to the time of issuance of the series of the preferred stock.

We are authorized to issue up to 25,000,000 shares of preferred stock, par value \$1.00 per share. As of September 30, 2017, no shares of preferred stock were outstanding. Subject to limitations prescribed by law, the board of directors is authorized at any time to issue one or more series of preferred stock.

The board of directors is authorized to determine, for each series of preferred stock, and the prospectus supplement will set forth with respect to the series the following information:

the designation for any series by number, letter or title that shall distinguish the series from any other series of preferred stock;

the number of shares in any series;

whether dividends on that series of preferred stock will be cumulative;

the dividend rate (or method for determining the rate);

any liquidation preference per share of that series of preferred stock;

any conversion provisions applicable to that series of preferred stock;

any redemption or sinking fund provisions applicable to that series of preferred stock;

any voting rights of that series of preferred stock; and

the terms of any other preferences or rights applicable to that series of preferred stock.

The preferred stock, when issued, will be fully paid and non-assessable.

Dividends

Holders of preferred stock will be entitled to receive, when, as and if declared by the board of directors, cash dividends at the rates and on the dates as set forth in the prospectus supplement. Generally, dividends on outstanding shares of preferred stock shall be declared and paid, or set apart for payment, before any dividends shall be declared or paid, or set apart for payment, on the outstanding shares of common stock with respect to the same dividend period.

Payment of dividends on any series of preferred stock may be restricted by loan agreements, indentures and other transactions we may enter into.

Liquidation

If we voluntarily or involuntarily liquidate, dissolve or wind up our affairs, the holders of each series of preferred stock will be entitled to receive the liquidation preference per share specified in the prospectus supplement plus any accrued and unpaid dividends. Holders of preferred stock will be entitled to receive these amounts before any distribution is made to the holders of common stock. If the amounts payable with respect to preferred stock are not paid in full, the holders of preferred stock will share ratably in any distribution of assets based upon the aggregate liquidation preference for all outstanding shares for each series. After the holders of shares of preferred stock are paid in full, they will have no right or claim to any of our remaining assets.

Neither the par value nor the liquidation preference is indicative of the price at which the preferred stock will actually trade on or after the date of issuance.

Table of Contents

Voting

Generally, the holders of preferred stock will not be entitled to vote except as set forth in the prospectus supplement, the Restated Certificate of Incorporation, as amended, or certificate of amendment or as otherwise required by law.

No Other Rights

The shares of a series of preferred stock will not have any preemptive rights, preferences, voting powers or relative, participating, optional or other special rights except as set forth in the prospectus supplement, the Restated Certificate of Incorporation, as amended, or certificate of amendment or as otherwise required by law.

Transfer Agent and Registrar

The transfer agent for each series of preferred stock will be designated in the prospectus supplement.

DESCRIPTION OF DEPOSITARY SHARES

Depositary Shares

We may, at our option, elect to offer fractional shares of preferred stock, rather than full shares of preferred stock. If we do, we will issue to the public receipts for depositary shares and each of these depositary shares will represent a fraction of a share of a particular series of preferred stock. Each owner of a depositary share will be entitled, in proportion to the applicable fractional interest in shares of preferred stock underlying that depositary share, to all rights and preferences of the preferred stock underlying that depositary share. Those rights include dividend, voting, redemption and liquidation rights.

The shares of preferred stock underlying the depositary shares will be deposited with a depositary under a deposit agreement between us, the depositary and the holders of the depositary receipts evidencing the depositary shares. The depositary will be a bank or trust company selected by us. The depositary will also act as the transfer agent, registrar and dividend disbursing agent for the depositary shares.

Holders of depositary receipts agree to be bound by the deposit agreement, which requires holders to take certain actions such as filing proof of residence and paying certain charges.

The following is a summary of the most important terms of the depositary shares. The deposit agreement, our Restated Certificate of Incorporation, as amended, and the certificate of amendment for the applicable series of preferred stock that are, or will be, filed with the SEC will set forth all of the terms relating to the depositary shares.

Dividends

The depositary will distribute all cash dividends or other cash distributions received in respect of the series of preferred stock underlying the depositary shares to the record holders of depositary receipts in proportion to the number of depositary shares owned by those holders on the relevant record date. The record date for the depositary shares will be the same date as the record date for the preferred stock.

In the event of a distribution other than in cash, the depositary will distribute property received by it to the record holders of depositary receipts that are entitled to receive the distribution. However, if the depositary determines that it is not feasible to make the distribution, the depositary may, with our approval, adopt another method for the

distribution.

The method may include selling the property and distributing the net proceeds to the holders.

Liquidation Preference

In the event of our voluntary or involuntary liquidation, dissolution or winding up, the holders of each depositary share will be entitled to receive the fraction of the liquidation preference accorded each share of the applicable series of preferred stock, as set forth in the applicable prospectus supplement.

Table of Contents

Redemption

If a series of preferred stock underlying the depositary shares is subject to redemption, the depositary shares will be redeemed from the proceeds received by the depositary resulting from the redemption, in whole or in part, of preferred stock held by the depositary. Whenever we redeem any preferred stock held by the depositary, the depositary will redeem, as of the same redemption date, the number of depositary shares representing the preferred stock so redeemed. The depositary will mail the notice of redemption to the record holders of the depositary receipts promptly upon receiving the notice in accordance with the procedures described in any accompany prospectus supplement.

Voting

Upon receipt of notice of any meeting at which the holders of preferred stock are entitled to vote, the depositary will mail the information contained in the notice of meeting to the record holders of the depositary receipts underlying the preferred stock. Each record holder of those depositary receipts on the record date will be entitled to instruct the depositary as to the exercise of the voting rights pertaining to the amount of preferred stock underlying that holder's depositary shares. The record date for the depositary shares will be the same date as the record date for the preferred stock. The depositary will try, as far as practicable, to vote the preferred stock underlying the depositary shares in accordance with the instructions of the holders of the depositary receipts. We will agree to take all action which may be deemed necessary by the depositary in order to enable the depositary to do so. The depositary will not vote the preferred stock to the extent that it does not receive specific instructions from the holders of depositary receipts.

Withdrawal of Preferred Stock

Owners of depositary shares are entitled, upon surrender of depositary receipts at the principal office of the depositary and payment of any unpaid amount due the depositary, to receive the number of whole shares of preferred stock underlying the depositary shares. Partial shares of preferred stock will not be issued. These holders of preferred stock will not be entitled to deposit the shares under the deposit agreement or to receive depositary receipts evidencing depositary shares for the preferred stock.

Amendment and Termination of Deposit Agreement

The form of depositary receipt evidencing the depositary shares and any provision of the deposit agreement may be amended at any time and from time to time by agreement between us and the depositary. However, any amendment which materially and adversely alters the rights of the holders of depositary shares, other than any change in fees, will not be effective unless the amendment has been approved by at least a majority of the depositary shares then outstanding. The deposit agreement may be terminated by us or the depositary only if:

all outstanding depositary shares have been redeemed or

there has been a final distribution in respect of the preferred stock in connection with our dissolution and such distribution has been made to all the holders of depositary shares.

Charges of Depositary

We will pay all transfer and other taxes and governmental charges arising solely from the existence of the depositary arrangements. We will also pay charges of the depositary in connection with the initial deposit of the preferred stock

and the initial issuance of the depositary shares, any redemption of the preferred stock and all withdrawals of preferred stock by owners of depositary shares. Holders of depositary receipts will pay transfer, income and other taxes and governmental charges and certain other charges as provided in the deposit agreement to be for their accounts. In certain circumstances, the depositary may refuse to transfer depositary shares, may withhold dividends and distributions and sell the depositary shares evidenced by the depositary receipt if the charges are not paid.

Reports to Holders

The depositary will forward to the holders of depositary receipts all reports and communications we deliver to the depositary that we are required to furnish to the holders of the preferred stock. In addition, the depositary will make available for inspection by holders of depositary receipts at the principal office of the depositary, and at other places as it may from time to time deem advisable, any reports and communications we deliver to the depositary as the holder of preferred stock.

Table of Contents

Liability and Legal Proceedings

Neither we nor the depositary will be liable if either of us are prevented or delayed by law or any circumstance beyond our control in performing our respective obligations under the deposit agreement. Our obligations and those of the depositary will be limited to performance in good faith of our respective duties under the deposit agreement. Neither we nor the depositary will be obligated to prosecute or defend any legal proceeding in respect of any depositary shares or preferred stock unless satisfactory indemnity is furnished. We and the depositary may rely on written advice of counsel or accountants, on information provided by holders of depositary receipts or other persons believed in good faith to be competent to give such information and on documents believed to be genuine and to have been signed or presented by the proper party or parties.

Resignation and Removal of Depositary

The depositary may resign at any time by delivering a notice to us of its election to do so. We may remove the depositary at any time. Any such resignation or removal will take effect upon the appointment of a successor depositary and its acceptance of such appointment. The successor depositary must be appointed within 60 days after delivery of the notice for resignation or removal. In addition, the successor depositary must be a bank or trust company having its principal office in the United States of America and having a combined capital and surplus of at least \$150,000,000.

DESCRIPTION OF COMMON STOCK

Common Stock

As of the date of this prospectus, we are authorized to issue up to 300,000,000 shares of common stock, \$1.00 par value per share. As of September 30, 2017, 218,346,074 shares of common stock were outstanding.

Dividends

Holders of common stock are entitled to receive dividends, in cash, securities, or property, as may from time to time be declared by our board of directors, subject to the rights of the holders of the preferred stock.

Voting

Each holder of common stock is entitled to one vote per share on all matters requiring a vote of the stockholders.

Rights Upon Liquidation

In the event of our voluntary or involuntary liquidation, dissolution, or winding up, the holders of common stock will be entitled to share equally in our assets available for distribution after payment in full of all debts and after the holders of preferred stock have received their liquidation preferences in full.

Statutory Provisions

Section 203 of the Delaware General Corporation Law (DGCL) prohibits a defined set of transactions between a Delaware corporation, such as us, and an interested stockholder. An interested stockholder is generally defined as a person who, together with any affiliates or associates of such person, beneficially owns, directly or indirectly, 15% or more of the outstanding voting shares of a Delaware corporation. This provision may prohibit business combinations

between an interested stockholder and a corporation for a period of three years after the date the interested stockholder becomes an interested stockholder. The term business combination is broadly defined to include mergers, consolidations, sales or other dispositions of assets having a total value in excess of 10% of the consolidated assets of the corporation, and some other transactions that would increase the interested stockholder's proportionate share ownership in the corporation.

This prohibition is effective unless:

the business combination is approved by the corporation's board of directors prior to the time the interested stockholder becomes an interested stockholder;

the interested stockholder acquired at least 85% of the voting stock of the corporation, other than stock held by directors who are also officers or by qualified employee stock plans, in the transaction in which it becomes an interested stockholder; or

Table of Contents

the business combination is approved by a majority of the board of directors and by the affirmative vote of two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

In general, the prohibitions do not apply to business combinations with persons who were stockholders before we became subject to Section 203.

Certificate of Incorporation and By-Law Provisions

Vacancies, and newly-created directorships resulting from any increase in the size of our board, may be filled by a majority vote of all remaining directors, even if the directors then on the board do not constitute a quorum or only one director is left in office.

These provisions, together with the provisions of Section 203 of the DGCL (as discussed above), could have the effect of delaying, deferring or preventing a change in control or the removal of existing management, of deterring potential acquirers from making an offer to our stockholders and of limiting any opportunity to realize premiums over prevailing market prices for our common stock in connection therewith. This could be the case notwithstanding that a majority of our stockholders might benefit from such a change in control or offer.

In addition, our By-laws contain a forum selection provision for the adjudication of certain disputes. Unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum for (a) any derivative action or proceeding brought on our behalf; (b) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders; (c) any action asserting a claim arising pursuant to any provision of the DGCL; or (d) any action asserting a claim governed by the internal affairs doctrine will be the Court of Chancery of the State of Delaware, or, if the Court of Chancery of the State of Delaware does not have jurisdiction, the Superior Court of the State of Delaware, or, if the Superior Court of the State of Delaware does not have jurisdiction, the United States District Court for the District of Delaware. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and consented to the forum selection provision of our By-laws.

Miscellaneous

Shares of common stock are not redeemable and have no subscription, conversion or preemptive rights.

DESCRIPTION OF WARRANTS

Warrants

We may issue warrants for the purchase of debt securities, preferred stock or common stock. Warrants may be issued independently or together with our debt securities, preferred stock or common stock and may be attached to or separate from any offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a bank or trust company, as warrant agent. The warrant agent will act solely as our agent in connection with the warrants and will not have any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants. A copy of the warrant agreement will be filed with the SEC in connection with the offering of warrants.

The prospectus supplement relating to a particular issue of warrants will describe the terms of those warrants, including the following:

the title of the warrants;

any offering price for the warrants;

the aggregate number of the warrants;

the designation and terms of the securities that may be purchased upon exercise of the warrants;

if applicable, the designation and terms of the securities together with which the warrants are issued and the number of warrants issued with each security;

any date from and after which the warrants and any securities issued with them will be separately transferable;

the principal amount of or number of shares of stock that may be purchased upon exercise of a warrant and the price at which the debt securities may be purchased upon exercise;

Table of Contents

the dates on which the right to exercise the warrants will commence and expire;

any minimum or maximum amount of the warrants that may be exercised at any one time;

the currency or currency units in which the offering price and the exercise price are payable;

if applicable, a discussion of material United States Federal, or other income tax considerations;

any antidilution provisions of the warrants;

any redemption or call provisions applicable to the warrants;

any additional terms of the warrants, including terms, procedures, and limitations relating to the exchange and exercise of the warrants;

whether the warrants represented by the warrant certificates or debt securities that may be issued upon exercise of the warrants will be issued in registered or bearer form; and

the name of the warrant agent and any information with respect to book-entry procedures.

After warrants expire they will become void. The prospectus supplement may provide for the adjustment of the exercise price of the warrants.

Warrants may be exercised at the appropriate office of the warrant agent or any other office indicated in an accompanying prospectus supplement. Before the exercise of warrants, holders will not have any of the rights of holders of the securities purchasable upon exercise and will not be entitled to payments made to holders of those securities.

PLAN OF DISTRIBUTION

We may sell the securities in one or more of four ways from time to time:

- (i) directly to purchasers;
- (ii) through underwriters;
- (iii) through agents; or

(iv) through dealers.

We may solicit offers to purchase securities directly or by the means of designated agents from time to time. Any such agent, who may be deemed to be an underwriter as that term is defined in the Securities Act involved in the offer or sale of the securities in respect of which this prospectus is delivered will be named, and any commissions payable by us to such agent will be set forth, in the prospectus supplement. Unless otherwise indicated in the prospectus supplement, any such agent will be acting on a best efforts basis for the period of its appointment. Agents may be customers of, engage in transactions with, or perform services for, us in the ordinary course of business.

We will identify the specific plan of distribution, including any underwriters, dealers, agents or direct purchasers and their compensation in a prospectus supplement.

LEGAL MATTERS

The legality of the securities in respect of which this prospectus is being delivered will be passed on for us by Skadden, Arps, Slate, Meagher & Flom LLP, New York, New York. The validity of any securities offered in the prospectus supplement relating to such securities will be passed upon for any underwriters or agents by counsel to be named in the prospectus supplement relating to such securities.

EXPERTS

The Company's consolidated financial statements and schedule as of 30 September 2017 and 2016, and for each of the years in the three-year period ended 30 September 2017, and management's assessment of the effectiveness of internal control over financial reporting as of 30 September 2017 have been incorporated by reference herein in reliance of the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

Table of Contents**PART II.****INFORMATION NOT REQUIRED IN PROSPECTUS****ITEM 14. Other Expenses of Issuance and Distribution.**

The following table sets forth the expenses, other than underwriting discounts and commissions, payable by the registrant in connection with the sale of the securities being registered hereby. All amounts, except the Securities and Exchange Commission (the SEC) registration fee, are estimates:

Registration Fee	\$	*
Printing Fees		**
Accountants Fees		**
Rating Agency Fees		**
Fees and Expenses of trustee		**
Legal Fees and Expenses		**
Miscellaneous		**
Total	\$	**

*In accordance with Rules 456(b) and 457(r) of the Securities Act of 1933, as amended (the Securities Act), we are deferring payment of the registration fee for the securities offered by this prospectus.

*These fees cannot be estimated at this time, as they are calculated based on the securities offered and the number of issuances. An estimate of the aggregate expenses in connection with the sale and distribution of the securities being offered will be included in the applicable prospectus supplement.

ITEM 15. Indemnification of Directors and Officers.

Section 102(b)(7) of the Delaware General Corporation Law (the DGCL) permits a corporation, in its certificate of incorporation, to limit or eliminate the liability of directors to the corporation or its stockholders for monetary damages for breaches of fiduciary duty, except for liability (a) for any breach of the director's duty of loyalty to the corporation or its stockholders, (b) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (c) under Section 174 of the DGCL, or (d) for any transaction from which the director derived an improper personal benefit. The provisions of Article Ninth of our Restated Certificate of Incorporation, as amended, eliminate the personal liability of directors of the Company to the extent set forth in the DGCL. Our Restated Certificate of Incorporation is filed as an exhibit herewith, and applicable amendments thereto are incorporated herein by reference to prior filings.

Under Section 145 of the DGCL, a corporation has the power to indemnify directors and officers against expenses (including attorneys' fees actually and reasonably incurred), judgments, fines and settlements, in connection with any action, suit or proceeding (other than derivative actions), whether civil, criminal, administrative or investigative, if it is determined that such person acted in good faith and in a manner he or she reasonably believed to be in (or not opposed to) the best interests of the corporation and, in the case of a criminal action, had no reasonable cause to believe that his

or her conduct was unlawful. In a derivative action brought by or in the right of the corporation, the DGCL permits indemnification of any such person if he or she acted in good faith and in a manner he or she reasonably believed to be in (or not opposed to) the best interests of the corporation, but no indemnification may be given where such person has been found to be liable to the corporation unless (and only to the extent that) a court determines that despite such finding of liability, such person is fairly and reasonably entitled to indemnification against such expenses which the court deems proper. Article V of our By-Laws provides for indemnification of our directors and officers to the fullest extent permitted by the DGCL. Article V of our By-Laws and Article Ninth of our Restated Certificate of Incorporation, as amended, further permits the Company to maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee or agent of another entity, against any liability asserted against such person and incurred by such person in any such capacity or arising out of his status as such, whether or not the Company would have the power to indemnify such person against such liability under the DGCL. Article Ninth of our Restated Certificate of Incorporation, as amended, also contains provisions which provide for indemnification of certain persons (including officers and directors).

We maintain insurance that generally insures our officers and directors and the officers and directors of our subsidiaries (as defined in the insurance policy) against liabilities incurred in their professional capacities, and insures us with respect to amounts to which officers and directors become entitled as indemnification payments from us, subject to certain specified exclusions and deductible and maximum amounts. We also maintain an insurance policy that protects, among others, certain of our officers and directors and certain of the officers and directors of our subsidiaries against liabilities incurred for Breach of Fiduciary Duty (as defined in the insurance policy) with respect to their performance of their duties and responsibilities in connection with certain of our pension and retirement plans, or the plans of certain of our subsidiaries, subject to certain specified exclusions and deductible and maximum amounts.

Table of Contents

ITEM 16. Exhibits.

The following Exhibits are filed as part of this Registration Statement:

Exhibit No.	Description of Exhibits
1.1	<u>Form of Underwriting Agreement for Senior Debt Securities. (Incorporated by reference to Exhibit 1.2 to the Registrant's Registration Statement No. 333-200537).</u>
1.2*	Form of Underwriting Agreement for Preferred Stock.
1.3*	Form of Underwriting Agreement for Depositary Shares.
1.4*	Form of Underwriting Agreement for Common Stock.
1.5*	Form of Underwriting Agreement for Warrants.
2.1	<u>Purchase Agreement dated as of 6 May 2016, by and between Air Products and Chemicals, Inc. and Evonik Industries. (Incorporated by reference to Exhibit 2.1 to the Registrant's Form 8-K Report dated 6 May 2016).</u>
2.2	<u>Separation Agreement dated as of 29 September 2016, by and between Air Products and Chemicals, Inc. and Versum Materials, Inc. (Incorporated by reference to Exhibit 2.1 to the Registrant's Form 8-K Report dated 29 September 2016).</u>
2.3	<u>Tax Matters Agreement dated as of 29 September 2016, by and between Air Products and Chemicals, Inc. and Versum Materials, Inc. (Incorporated by reference to Exhibit 2.2 to the Registrant's Form 8-K Report dated 29 September 2016).</u>
3.1	<u>Amended and Restated By-Laws of the Registrant. (Incorporated by reference to Exhibit 3.1 to the Registrant's Form 8-K Report dated November 21, 2014).</u>
3.2	Restated Certificate of Incorporation of the Registrant. (Incorporated by reference to Exhibit 3.2 to the Registrant's Form 10-K Report for the fiscal year ended September 30, 1987).
3.3	<u>Amendment to the Restated Certificate of Incorporation of the Registrant dated January 25, 1996. (Incorporated by reference to Exhibit 3.3 to the Registrant's Form 10-K Report for the fiscal year ended September 30, 1996).</u>
3.4	<u>Amendment to the Restated Certificate of Incorporation of the Registrant dated January 28, 2014. (Incorporated by reference to Exhibit 10.2 to the Registrant's Form 10-Q Report for the quarter ended June 30, 2014).</u>
4.1	<u>Form of Indenture between the Registrant and The Bank of New York Mellon Trust Company, N.A.</u>
4.2*	Form of Certificate of Designations for Preferred Stock (including form of Preferred Stock Certificate).
4.3*	Form of Depositary Agreement (including form of Depositary Receipt).
4.4*	Form of Warrant Agreement (including form of Warrant Certificate).
5.1	<u>Opinion of Company counsel as to legality of the securities to be issued.</u>
12.1	<u>Statement Re: Computation of Ratio of Earnings to Fixed Charges. (Incorporated by reference to Exhibit 12 to the Registrant's Form 10-K Report for the fiscal year ended September 30, 2017).</u>

- 23.1 Consent of KPMG LLP, Independent Registered Public Accounting Firm.
- 23.2 Consent of Company counsel (included in Exhibit 5.1).
- 24.1 Powers of Attorney.
- 25.1 Statement of Eligibility on Form T-1 of trustee with respect to the form of Indenture filed herewith.

* To be filed by amendment to the Registration Statement or incorporated by reference from documents filed or to be filed with the SEC under the Securities Exchange Act of 1934, as amended.

ITEM 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act;

Table of Contents

(ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

provided, however, that the undertakings set forth in paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the

securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

Table of Contents

- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) If applicable, the undersigned registrant hereby undertakes to supplement the prospectus, after the expiration of the subscription period, to set forth the results of the subscription offer, the transactions by the underwriters during the subscription period, the amount of unsubscribed securities to be purchased by the underwriters, and the terms of any subsequent reoffering thereof. If any public offering by the underwriters is to be made on terms differing from those set forth on the cover page of the prospectus, a post-effective amendment will be filed to set forth the terms of such offering.
- (d) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.
- (e) The undersigned registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under Subsection (a) of section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the Commission under section 305(b)(2) of the Trust Indenture Act.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Allentown and Commonwealth of Pennsylvania on the 22nd day of November, 2017.

AIR PRODUCTS AND CHEMICALS, INC.
(Registrant)

By: /s/ M. Scott Crocco
Name: M. Scott Crocco
Title: Executive Vice President and
Chief Financial Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement on Form S-3 has been signed by the following persons in the capacities indicated on November 22, 2017.

SIGNATURE	TITLE
<p style="text-align: center;">*</p> <p>Seifi Ghasemi</p>	<p>Chairman, President and Chief Executive Officer (Principal Executive Officer)</p>
<p>/s/ M. Scott Crocco M. Scott Crocco</p>	<p>Executive Vice President and Chief Financial Officer (Principal Financial Officer)</p>
<p>/s/ Russell A. Flugel Russell A. Flugel</p>	<p>Vice President, Corporate Controller and Principal Accounting Officer (Principal Accounting Officer)</p>
<p style="text-align: center;">*</p> <p>Susan K. Carter</p>	<p>Director</p>
<p style="text-align: center;">*</p> <p>Charles I. Cogut</p>	<p>Director</p>
<p style="text-align: center;">*</p> <p>Chadwick C. Deaton</p>	<p>Director</p>
<p style="text-align: center;">*</p> <p>David H.Y. Ho</p>	<p>Director</p>

* Director
Margaret G. McGlynn

* Director
Edward L. Monser

* Director
Matthew H. Paull

* Mary T. Afflerbach, Corporate Secretary, by signing her name hereto, does sign this document on behalf of the above noted individuals, pursuant to a power of attorney duly executed by such individuals which is filed with the Securities and Exchange Commission herewith.

By: /s/ Mary T. Afflerbach
(Mary T. Afflerbach, Attorney-in-Fact)