
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 8-K

CURRENT REPORT

**Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported) June 1, 2016

Air Products and Chemicals, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

1-4534
(Commission
File Number)

23-1274455
(IRS Employer
Identification No.)

7201 Hamilton Boulevard, Allentown, Pennsylvania
(Address of Principal Executive Offices)

18195-1501
(Zip Code)

(610) 481-4911
Registrant's telephone number, including area code

not applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (See General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 8.01. Other Events.

On June 1, 2016, Air Products and Chemicals, Inc. (the “Company”) issued and sold €350,000,000 in aggregate principal amount of 0.375% notes due June 1, 2021 (the “Notes”). The Notes were issued pursuant to the Company’s Registration Statement on Form S-3 (No. 333-200537) and the Prospectus included therein (the “Registration Statement”), filed by the Company with the Securities and Exchange Commission (the “Commission”) on November 24, 2014, and the Prospectus Supplement relating thereto dated May 24, 2016, and filed with the Commission on May 25, 2016. The Notes were issued under an Indenture dated as of January 10, 1995, between the Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (the “Indenture”), and an Officers’ Certificate containing the terms of the Notes. The Indenture, together with the Officers’ Certificate, sets forth the terms of the Notes and the obligations of the Company thereunder. A copy of the Officers’ Certificate is filed as Exhibit 4.1 to this Current Report on Form 8-K and is incorporated by reference herein.

A copy of the opinion of Ann E. Padjen, Senior Corporate and Finance Counsel of the Company, relating to the legality of the Notes, is filed as Exhibit 5.1 to this Current Report on Form 8-K.

This Current Report on Form 8-K is filed for the purpose of filing the documents attached as exhibits hereto as exhibits to the Registration Statement in connection with the issuance of the Notes, and such exhibits are hereby incorporated by reference into the Registration Statement.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
4.1	Officers’ Certificate, dated June 1, 2016, establishing the terms, and setting forth the form of the 0.375% Notes due 2021.
4.2	Form of Note (included as Exhibit A to the Officers’ Certificate in Exhibit 4.1).
5.1	Opinion of Ann E. Padjen, Senior Corporate and Finance Counsel of the Company.
23.1	Consent of Ann E. Padjen (included in Exhibit 5.1).

Exhibit Index

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€350,000,000

0.375% Notes due 2021

Officers' Certificate to the Trustee
and Company Order for Authentication

The undersigned, M. Scott Crocco, as Senior Vice President and Chief Financial Officer of Air Products and Chemicals, Inc. (the "**Company**"), a Delaware corporation, and Gregory E. Weigard, as Corporate Treasurer of the Company, hereby certify on behalf of the Company pursuant to Sections 2.3, 2.4 and 11.5 of the Indenture (the "**Indenture**") dated as of January 10, 1995, between the Company and The Bank of New York Mellon Trust Company, N.A., successor to U.S. Bank, National Association (formerly Wachovia Bank, National Association and initially First Fidelity Bank, National Association), as trustee (the "**Trustee**"), in connection with the issuance of €350,000,000 principal amount of the Company's 0.375% Notes due 2021 (the "**Notes**"), as follows:

1. We have read the relevant provisions of the Indenture including, but not limited to, Sections 2.1, 2.3 and 2.4 of the Indenture, including the definitions set forth in the Indenture as to terms used in those Sections; have read and reviewed the resolutions of the Board of Directors relating to issuance and establishing the form of the captioned Notes and the manner in which the terms thereof are to be determined, and have reviewed the forms of the Notes attached hereto as Exhibit A. A Certificate of the Secretary or an Assistant Corporate Secretary of the Company certifying, among other things, the resolutions referred to above attached thereto is being provided to you simultaneously herewith. In our opinion, we have made such examination or investigation as is necessary for us to express an informed opinion as to whether the conditions precedent to the execution, authentication and delivery of the Notes have been satisfied and, in our opinion, all such conditions precedent have been complied with.
2. The Indenture has been duly and validly authorized, executed and delivered by the Company.
3. Attached hereto as Exhibit A is a true, correct and complete specimen of the Notes, which complies with the resolutions and approval referred to above and which establishes the form and terms of the Notes as required by Sections 2.1 and 2.3 of the Indenture. In addition, pursuant to the Indenture, the following provisions will apply to this series of Notes:
 - (a) Section 3.5 is amended to replace the final sentence in its entirety with the following: "At least one signatory to such statement shall be the

principal executive officer, principal financial officer, principal accounting officer, treasurer or an assistant treasurer of the Issuer.”

(b) Section 4.3 is amended to add the following subsection (d):

“(d) Any reports, information, or documents required under subsections (a) or (b) of this Section 4.3 to be filed with the Trustee will be deemed to be so filed with the Trustee upon being filed with the Commission pursuant to its EDGAR system.”

(c) Section 6.2 is hereby amended to add the following clause (i):

“(i) the Trustee may accept and act upon notice, instructions or directions pursuant to this Indenture sent by unsecured e-mail, facsimile transmission or other similar unsecured electronic methods. If the Issuer elects to give the Trustee e-mail or facsimile instructions (or instructions by a similar electronic method) and the Trustee, in its discretion, elects to act upon such instructions, the Trustee’s reasonable understanding of such instructions shall be deemed controlling. The Trustee shall not be liable for any losses, costs or expenses arising directly or indirectly from the Trustee’s reliance upon and compliance with such instructions notwithstanding such instructions conflict or are inconsistent with a subsequent written instruction. The Issuer assumes all risks arising out of its use of electronic methods to submit instructions and directions to the Trustee, including without limitation the risk of the Trustee acting upon unauthorized instructions and the risk of interception and misuse by third parties.”

(d) Section 8.4 is hereby amended to add the following sentence to the end of such Section:

“In addition, the Trustee shall be entitled to receive an Opinion of Counsel stating that the supplemental indenture is authorized or permitted by this Indenture.”

(e) Section 11.8 is hereby amended to add the following provisions to the end of such Section:

“EACH OF THE ISSUER AND THE TRUSTEE HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS INDENTURE, THE SECURITIES OR ANY TRANSACTION CONTEMPLATED HEREBY. Further, each of the Issuer and the Trustee hereby irrevocably submits to the jurisdiction of any New York State court sitting in the Borough of Manhattan in the City of New York or any federal court sitting in the Borough of Manhattan in the City of New York in respect of any suit, action or proceeding arising out of or relating to this

Indenture and the Securities, and irrevocably accepts for itself and in respect of its property, generally and unconditionally, jurisdiction of the aforesaid courts.”

(f) Article 11 is hereby amended to add the following Sections:

“**SECTION 11.13 No Consequential Damages.** In no event shall the Trustee be responsible or liable for special, indirect or consequential loss or damage of any kind whatsoever (including without limitation any loss of profit) irrespective of whether it has been advised of the likelihood of such loss or damage and regardless of the form of action.”

“**SECTION 11.14 Force Majeure.** In no event shall the Trustee be responsible or liable for any failure or delay in the performance of its obligations hereunder arising out of or caused by (directly or indirectly) forces beyond its control and not due to its negligence; such forces may include without limitation strikes, work stoppages, accidents, acts of war or terrorism, civil or military disturbances, nuclear or natural catastrophes or acts of God, and interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services; it being understood that the affected party shall use reasonable efforts that are consistent with accepted practices in the banking industry and to resume performance as soon as practicable under the circumstances.”

(g) Section 11.5 is hereby amended to add the following sentence to the end of such Section;

“Delivery of such reports, information and documents to the Trustee is for informational purposes only and the Trustee’s receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Issuer’s compliance with any of its covenants hereunder (as to which the Trustee is entitled to rely exclusively on Officers’ Certificates).”

(h) The Company may, without the consent of the holders of a series of the Notes, issue additional Notes having the same ranking and the same interest rate, maturity and other terms (except for the issue date and public offering price) as the Notes. Any additional Notes having such similar terms, together with the Notes, will constitute a single series of Securities (as defined in the Indenture) under the Indenture. No additional Notes having such similar terms may be issued if an Event of Default has occurred with respect to the Notes or if such additional Notes will not be fungible with the previously issued Notes for federal income tax purposes.

Pursuant to Section 2.4 of the Indenture, the Company hereby authorizes and directs that you authenticate and deliver €350,000,000 aggregate principal amount of its 0.375% Notes due 2021, CUSIP 009158 AX4, ISIN XS1419858094,

Certificate No. 1, in the name of The Bank of New York Depository (Nominees) Limited, as nominee of The Bank of New York Mellon, London Branch, a common depository for Euroclear Bank S.A./N.V. and Clearstream Banking, société anonyme, Luxembourg.

[Signature page follows]

By: /s/ M. Scott Crocco

Name: M. Scott Crocco

Title: Senior Vice President and Chief Financial Officer

By: /s/ Gregory E. Weigard

Name: Gregory E. Weigard

Title: Corporate Treasurer

Dated: June 1, 2016

[Officer's Certificate Designating Terms]

Form of Note

UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF EUROCLEAR BANK, S.A./N.V., AS OPERATOR OF THE EUROCLEAR SYSTEM (“EUROCLEAR”) AND CLEARSTREAM BANKING, *SOCIÉTÉ ANONYME*, LUXEMBOURG (“CLEARSTREAM, LUXEMBOURG” AND, TOGETHER WITH EUROCLEAR, “EUROCLEAR/CLEARSTREAM”), TO THE ISSUER OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF THE BANK OF NEW YORK DEPOSITORY (NOMINEES) LIMITED OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF EUROCLEAR/CLEARSTREAM (AND ANY PAYMENT IS MADE TO THE BANK OF NEW YORK DEPOSITORY (NOMINEES) LIMITED OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF EUROCLEAR/CLEARSTREAM), ANY TRANSFER, PLEDGE, OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL IN AS MUCH AS THE REGISTERED OWNER HEREOF, THE BANK OF NEW YORK DEPOSITORY (NOMINEES) LIMITED, HAS AN INTEREST HEREIN.

THIS SECURITY IS A GLOBAL SECURITY AS REFERRED TO IN THE INDENTURE HEREINAFTER REFERENCED. UNLESS AND UNTIL IT IS EXCHANGED IN WHOLE OR IN PART FOR THE INDIVIDUAL SECURITIES REPRESENTED HEREBY, THIS GLOBAL SECURITY MAY NOT BE TRANSFERRED EXCEPT AS A WHOLE BY THE DEPOSITARY TO A NOMINEE OF THE DEPOSITARY OR BY A NOMINEE OF THE DEPOSITARY TO THE DEPOSITARY OR ANOTHER NOMINEE OF THE DEPOSITARY OR BY THE DEPOSITARY OR ANY SUCH NOMINEE TO A SUCCESSOR DEPOSITARY OR A NOMINEE OF SUCH SUCCESSOR DEPOSITARY.

AIR PRODUCTS AND CHEMICALS, INC.

0.375% Note due 2021

CUSIP 009158 AX4
ISIN XS1419858094

No. 1

Interest Payment Dates: June 1 of each year, commencing June 1, 2017

Record Dates: Fifteenth calendar day preceding each Interest Payment Date Interest Rate: 0.375% per annum

Original Issue Date: June 1, 2016 Maturity Date: June 1, 2021

AIR PRODUCTS AND CHEMICALS, INC., a Delaware corporation (the “Issuer”), for value received, hereby promises to pay to The Bank of New York Depository (Nominees) Limited (the “Depository”) as nominee of The Bank of New York Mellon, London Branch, a common depository for Euroclear Bank S.A./N.V. and Clearstream Banking, *société anonyme*, Luxembourg, or registered assigns, the principal sum of Three Hundred Fifty Million Euros (€350,000,000.00) on the Maturity Date specified above or upon earlier redemption at The Bank of New York Mellon, London Branch (the “Paying Agent”), as Paying Agent, currently located

at One Canada Square, London E14 5AL, or such other location or locations as may be provided for pursuant to the Indenture referred to herein, in such coin, currency or currency unit specified above as at the time of payment shall be legal tender for the payment of public and private debts, and to pay interest annually on the Interest Payment Date in each year and on the Maturity Date or upon earlier redemption or repayment; commencing with the first Interest Payment Date next succeeding the Original Issue Date specified above on said principal sum at the Interest Rate specified above from the most recent date to which interest has been paid or duly provided for, or, if no interest has been paid or duly provided for, from the Original Issue Date, until the principal hereof becomes due and payable; provided, however, that any payment of principal or interest to be made on an Interest Payment Date, on the Maturity Date or on a date fixed for redemption which is not a Business Day (as hereinafter defined) shall be made on the next succeeding Business Day with the same force and effect as if made on the Interest Payment Date, on the Maturity Date or on the date fixed for redemption, as the case may be, and no additional interest shall accrue as a result of such delayed payment. For purposes of this Note, "Business Day," means any day, other than a Saturday or Sunday, that is neither a legal holiday nor a day on which banking institutions are authorized or required by law or regulation to close in New York, New York or London, and on which the Trans-European Automated Real-Time Gross settlement Express Transfer system (the TARGET2 System) or any successor thereto, is open.

The interest so payable, and punctually paid or duly provided for, on any Interest Payment Date will be paid to the person in whose name this Note (or one or more predecessor Notes) is registered at the close of business on the Record Date (whether or not a Business Day) immediately preceding such Interest Payment Date and interest payable on the Maturity Date or upon earlier redemption will be payable to the person to whom principal is payable, except that, if this Note is issued between a Record Date and the initial Interest Payment Date relating to such Record Date, interest for the period beginning on the Original Issue Date and ending on such initial Interest Payment Date shall be paid to the person to whom this Note shall have been originally issued. Payment of principal and interest on this Note will be made, if at maturity or upon earlier redemption, then on the Maturity Date or the date fixed for redemption, as applicable, upon surrender of this Note at the office of the Paying Agent. All such payments shall be made in immediately available funds, provided that this Note is presented to the Paying Agent in time for the Trustee to make such payments in such funds in accordance with its normal procedures. Payment of interest on this Note (other than interest paid on the Maturity Date or upon earlier redemption) will be made by wire transfer to the person entitled thereto appearing on the register for the Notes on the applicable Record Date; provided that such holder shall have designated such account by written notice to the Trustee no later than the Record Date preceding the applicable Interest Payment Date. Notwithstanding the foregoing, payments of principal and interest on Global Securities shall be made in accordance with the Depositary's procedures. Any interest not punctually paid or duly provided for shall be payable as provided in the Indenture referred to on the reverse hereof.

Interest will be computed on the basis of the actual number of days in the period for which interest is being calculated and the actual number of days from and including the last date on which interest was paid on the Notes (or June 1, 2016, if no interest has been paid on the Notes), to but excluding the next scheduled interest payment date. This payment convention is referred to as ACTUAL/ACTUAL (ICMA) as defined in the rulebook of the International Capital Markets Association.

Principal and interest payments of the Notes are payable in Euro. If, on or after May 24, 2016, the Euro is unavailable to the Issuer due to the imposition of exchange controls or other circumstances beyond the control of the Issuer or if the Euro is no longer being used by the then-member states of the European Monetary Union that have adopted the Euro as their currency or for the settlement of transactions by public institutions of or within the international banking community, then all payments in respect of the Notes will be made in U.S. dollars until the Euro is again available to us or so used. In such circumstances, the amount payable on any date in Euros will be converted into U.S. dollars in accordance with the Indenture. Any payment in respect of the Notes so made in U.S. dollars will not constitute an Event of Default under the Notes or the Indenture.

REFERENCE IS HEREBY MADE TO THE FURTHER PROVISIONS OF THIS NOTE SET FORTH ON THE REVERSE HEREOF, WHICH FURTHER PROVISIONS SHALL HAVE THE SAME EFFECT AS THOUGH FULLY SET FORTH AT THIS PLACE.

This Note shall not be valid or become obligatory for any purpose until the certificate of authentication hereon shall have been manually signed by or on behalf of the Trustee under the Indenture referred to on the reverse hereof.

AGENCY FOR TRANSFER, EXCHANGE AND PAYMENT: THE BANK OF NEW YORK MELLON, LONDON BRANCH

IN WITNESS WHEREOF, the Issuer has caused this instrument to be signed in its name by its duly authorized officers, and has caused its corporate seal to be affixed hereunto or imprinted hereon.

Dated: June 1, 2016

AIR PRODUCTS AND CHEMICALS, INC.

By: _____

Name: Gregory E. Weigard

Title: Vice President and Corporate Treasurer

(CORPORATE SEAL)

Attest:

Name: Ann E. Padjen

Title: Assistant Secretary and Senior Corporate and Finance Counsel

TRUSTEE'S CERTIFICATE OF AUTHENTICATION

This is one of the Debt Securities of the series designated therein referred to in the within-mentioned Indenture.

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., as Trustee

By:

Authorized Officer

Dated: June 1, 2016

REVERSE OF NOTE

This Note is one of a duly authorized issue of unsecured debentures, notes or other evidences of indebtedness of the Issuer (hereinafter called the “Securities”) of the series hereinafter specified, all issued or to be issued under and pursuant to an indenture dated as of January 10, 1995 (the “Indenture”), duly executed and delivered by the Issuer to The Bank of New York Mellon Trust Company, N.A., successor to U.S. Bank National Association (formerly Wachovia Bank, National Association and initially First Fidelity Bank, National Association), as Trustee (the “Trustee”), to which Indenture and all indentures supplemental thereto reference is hereby made for a description of the rights, limitations of rights, obligations, duties and immunities thereunder of the Trustee, the Issuer and the holders (the words “holders” or “holder” meaning the registered holders or registered holder of the Securities). The Securities may be issued in one or more series, which different series (and which securities issued within each series) may be issued in various aggregate principal amounts, may mature at different times, may bear interest (if any) at different rates, may be subject to different redemption or repayment provisions (if any), may be subject to different sinking fund or analogous provisions (if any), may be subject to different Events of Default (as defined in the Indenture) and may otherwise vary as in the Indenture provided. This Note is one of a series designated as “0.375% Notes due 2021” (the “Notes”) of the Issuer, initially limited in aggregate principal amount to €350,000,000, subject to the right of the Issuer to reopen the series and issue additional principal amounts; provided that no additional Notes having such similar terms may be issued if an Event of Default has occurred with respect to the Notes or if such additional Notes will not be fungible with the previously issued Notes for federal income tax purposes.

In case an Event of Default with respect to the Notes shall have occurred and be continuing, the principal hereof may be declared, and upon such declaration shall become, due and payable, in the manner, with the effect and subject to the conditions provided in the Indenture.

At any time, or from time to time, prior to May 1, 2021, the Notes may be redeemed, as a whole or in part, at the Issuer’s option upon mailing a notice of such redemption not less than 30 days nor more than 60 days prior to the date fixed for redemption to the holders of the Notes at their last registered addresses, all as provided in the Indenture, at a redemption price equal to the greater of: (i) 100% of the principal amount of the Notes to be redeemed; or (ii) the sum of the present values of the Remaining Scheduled Payments, as defined below, discounted to the redemption date on an annual basis (ACTUAL/ACTUAL (ICMA)) at the Comparable Government Bond Rate, as defined below, plus fifteen (15) basis points, plus, in each case, any interest accrued but not paid to the date of redemption. The redemption price shall be calculated by the Issuer.

At any time on or after May 1, 2021, the Notes may be redeemed, at the Issuer’s option, upon mailing of a notice of such redemption not less than 30 days nor more than 60 days prior to the date fixed for redemption to the holders of the Notes at their last registered addresses, all as provided in the Indenture, at a redemption price equal to 100% of the principal amount of the applicable Notes being redeemed, plus accrued and unpaid interest on the principal amount being redeemed, to but excluding the redemption date.

“Comparable Government Bond” means, in relation to any Comparable Government Bond Rate calculation, at the discretion of an independent investment bank selected by the Issuer, a German *Bundesanleihe* security whose maturity is closest to the maturity of the Notes, or if such independent investment bank in its discretion considers that such similar bond is not in issue, such other German *Bundesanleihe* security as such independent investment bank may, with the advice of three brokers of, and/or market makers in, German *Bundesanleihe* securities selected by such independent investment bank, determine to be appropriate for determining the Comparable Government Bond Rate.

“Comparable Government Bond Rate” means the price, expressed as a percentage (rounded to three decimal places, 0.0005 being rounded upwards), at which the gross redemption yield on the Notes, if they were to be purchased at such price on the third business day prior to the date fixed for redemption, would be equal to the gross redemption yield on such business day of the Comparable Government Bond (as defined above) on the basis of the middle market price of the Comparable Government Bond prevailing at 11:00 a.m. (London time) on such business day as determined by an independent investment bank selected by the Issuer.

“Remaining Scheduled Payments” means, with respect to each Note to be redeemed, the remaining scheduled payments of the principal thereof and interest thereon that would be due after the related redemption date but for such redemption; provided, however, that, if such redemption date is not an interest payment date with respect to such Note, the amount of the next succeeding scheduled interest payment thereon will be deemed to be reduced by the amount of interest accrued thereon to such redemption date.

If, as a result of any change in, or amendment to, the laws of the United States or the official interpretation thereof that is announced or becomes effective on or after May 24, 2016, the Issuer becomes or, based upon a written opinion of nationally recognized independent counsel selected by the Issuer, will become obligated within 90 days to pay additional amounts as described below with respect to the Notes, then the Issuer may, at any time and at its option, redeem, in whole, but not in part, the Notes on not less than 30 nor more than 60 days’ prior notice, at a redemption price equal to 100% of their principal amount, together with accrued and unpaid interest on the Notes to, but not including, the date fixed for redemption.

The Issuer will, subject to the exceptions and limitations set forth below, pay as additional interest on the Notes such additional amounts as are necessary in order that the net payment by the Issuer or a paying agent of the principal of and interest on the Notes to a holder that is not a United States person (as defined below), after withholding or deduction for any present or future tax, assessment or other governmental charge imposed by the United States or a taxing authority in the United States, will not be less than the amount provided in the Notes to be then due and payable; provided, however, that the foregoing obligation to pay additional amounts shall not apply:

- (1) to any tax, assessment or other governmental charge that would not have been imposed but for the holder, a fiduciary, settlor, beneficiary, member or shareholder of the holder, or a person holding a power over an estate or trust administered by a fiduciary holder, being treated as:

- (a) being or having been engaged in a trade or business in the United States, or having or having had a permanent establishment in the United States;
 - (b) having a current or former connection with the United States (other than a connection arising solely as a result of the ownership of the Notes, the receipt of any payment in respect of the Notes or the enforcement of any rights under the Indenture), including being or having been a citizen or resident of the United States;
 - (c) being or having been a personal holding company, a passive foreign investment company or a controlled foreign corporation for U.S. federal income tax purposes, a foreign tax exempt organization, or a corporation that has accumulated earnings to avoid United States federal income tax;
 - (d) being or having been a “10-percent shareholder” of the Issuer, as defined in section 871(h)(3) of the United States Internal Revenue Code of 1986, as amended (the “Code”) or any successor provision; or
 - (e) being a bank receiving payments on an extension of credit made pursuant to a loan agreement entered into in the ordinary course of its trade or business, within the meaning of section 881(c)(3) of the Code or any successor provision;
- (2) to any holder that is not the sole beneficial owner of the Notes, or a portion of the Notes, or that is a fiduciary, partnership or limited liability company, but only to the extent that a beneficiary or settlor with respect to the fiduciary, a beneficial owner or member of the partnership or limited liability company would not have been entitled to the payment of an additional amount had the beneficiary, settlor, beneficial owner or member received directly its beneficial or distributive share of the payment;
 - (3) to any tax, assessment or other governmental charge that would not have been imposed but for the failure of the holder or beneficial owner to comply with certification, identification or information reporting requirements concerning the nationality, residence, identity or connection with the United States of the holder or beneficial owner of the Notes, if compliance is required by statute, by regulation of the United States or any taxing authority therein or by an applicable income tax treaty to which the United States is a party as a precondition to exemption from such tax, assessment or other governmental charge;
 - (4) to any tax, assessment or other governmental charge that is imposed otherwise than by withholding from the payment;
 - (5) to any tax, assessment or other governmental charge that would not have been imposed but for a change in law, regulation, or administrative or judicial interpretation that becomes effective more than 15 days after the payment becomes due or is duly provided for, whichever occurs later;

- (6) to any estate, inheritance, gift, sales, excise, transfer, wealth, capital gains or personal property tax or similar tax, assessment or other governmental charge;
- (7) to any tax, assessment or other governmental charge required to be withheld by any paying agent from any payment of principal of or interest on any Note, if such payment can be made without such withholding by at least one other paying agent in a member state of the European Union;
- (8) to any tax, assessment or other governmental charge that would not have been imposed but for the presentation by the holder of any Note, where presentation is required, for payment on a date more than 30 days after the date on which payment became due and payable or the date on which payment thereof is duly provided for, whichever occurs later;
- (9) to any tax, assessment or other governmental charge required to be withheld or deducted that is imposed on a payment pursuant to Sections 1471 through 1474 of the Code (or any amended or successor version of such Sections that is substantively comparable and not materially more onerous to comply with), any Treasury regulations promulgated thereunder, or any other official interpretations thereof, any agreement (including any intergovernmental agreement) entered into in connection therewith, or any law, regulation or other official guidance enacted in any jurisdiction implementing the Foreign Account Tax Compliance Act ("FACTA") or an intergovernmental agreement in respect of FATCA; or
- (10) in the case of any combination of items (1), (2), (3), (4), (5), (6), (7), (8), and (9).

Except as specifically provided above, the Issuer will not be required to pay additional amounts in respect of any tax, assessment or other governmental charge.

For the purposes of the two preceding paragraphs, "United States" means the United States of America, any state thereof, and the District of Columbia, and the term "United States person" means (i) any individual who is a citizen or resident of the United States for U.S. federal income tax purposes, (ii) a corporation, partnership or other entity created or organized in or under the laws of the United States, any state thereof or the District of Columbia (other than a partnership that is not treated as a United States person for U.S. federal income tax purposes), (iii) any estate the income of which is subject to U.S. federal income taxation regardless of its source, or (iv) any trust if a U.S. court can exercise primary supervision over the administration of the trust and one or more United States persons can control all substantial trust decisions, or if a valid election is in place to treat the trust as a United States person.

Upon the occurrence of a Change of Control Triggering Event, the Issuer will be required to make an offer (a "Change of Control Offer") to each holder of Notes to repurchase all or any part (equal to €1,000 or an integral multiple thereof) of such holder's Notes at a purchase price equal to 101% of the aggregate principal amount thereof, together with accrued and unpaid interest thereon to the date of repurchase (the "Change of Control Payment"). Within 30 days following any Change of Control Triggering Event, the Issuer will be required to mail (or otherwise transmit in accordance with the Depositary) a notice to each holder stating:

- (1) that the Change of Control Offer is being made pursuant to the covenant entitled “Change of control and ratings decline”;
- (2) the purchase price and the purchase date, which shall be no earlier than 30 days nor later than 45 days after the date such notice is mailed (the “Change of Control Payment Date”);
- (3) that any Notes not tendered will continue to accrue interest in accordance with the terms of the Indenture and this Note;
- (4) that, unless the Issuer defaults in the payment of the Change of Control Payment, all Notes accepted for payment pursuant to the Change of Control Offer will cease to accrue interest after the Change of Control Payment Date;
- (5) that holders will be entitled to withdraw their election if the paying agent receives, not later than the close of business on the fifth business day preceding the Change of Control Payment Date, a telegram, telex, facsimile transmission or letter setting forth the name of the holder, the principal amount of Notes delivered for purchase, and a statement that such holder is unconditionally withdrawing its election to have such Notes purchased;
- (6) that holders whose Notes are being purchased only in part will be issued new Notes equal in principal amount to the unpurchased portion of the Notes surrendered, which unpurchased portion must be equal to €100,000 in principal amount or an integral multiple of €1,000 in excess thereof; and
- (7) any other information material to such holder’s decision to tender Notes.

The Issuer will not be required to make a Change of Control Offer following a Change of Control Triggering Event if a third party makes a Change of Control Offer in the manner, at the times and otherwise in compliance with the requirements set forth in the Notes applicable to a Change of Control Offer made by the Issuer and purchases all Notes validly tendered and not withdrawn under such Change of Control Offer. Notwithstanding anything to the contrary herein, a Change of Control Offer may be made in advance of a Change of Control Triggering Event, conditional upon such Change of Control, if a definitive agreement is in place for the Change of Control at the time of making the Change of Control Offer.

“Board of Directors” means either the Board of Directors of the Issuer or any committee of such Board duly authorized to act hereunder.

“Capital Stock” means any and all shares, interests, participations, rights or other equivalents, however designated, of corporate stock or partnership or membership interests, whether common or preferred.

“Change of Control” means the occurrence of any one of the following:

- (1) the consummation of any transaction (including without limitation, any merger or consolidation) the result of which is that any person (including any “person” (as

that term is used in Section 13(d)(3) of the Exchange Act (as defined below))) becomes the “beneficial owner” (as defined in Rules 13d-3 and 13d-5 under the Exchange Act), directly or indirectly, of more than 50% of the Issuer’s outstanding Voting Stock, measured by voting power rather than number of shares;

- (2) the first day on which the majority of the members of the Issuer’s Board of Directors cease to be Continuing Directors; or
- (3) the adoption of a plan relating to the liquidation or dissolution of the Issuer.

“Change of Control Triggering Event” means the occurrence of both a Change of Control and a Ratings Decline.

“Continuing Director” means, as of any date of determination, any member of the Issuer’s Board of Directors who:

- (1) was a member of such Board of Directors on the date of the issuance of the Notes; or
- (2) was nominated for election or elected to such Board of Directors with the approval of a majority of the Continuing Directors who were members of such Board of Directors at the time of such nomination or election.

“Investment Grade” means a rating of Baa3 or better by Moody’s (or its equivalent under any successor rating category of Moody’s) and a rating of BBB- or better by S&P (or its equivalent under any successor rating category of S&P). In the event that the Issuer shall select any other Rating Agency, the equivalent of such ratings by such Rating Agency shall be used.

“Moody’s” means Moody’s Investors Service, Inc., a subsidiary of Moody’s Corporation, and its successors.

“Rating Agency” means each of Moody’s and S&P and any other Rating Agency appointed by the Issuer.

“Ratings Decline” means within 60 days after the earlier of, (i) the occurrence of a Change of Control or (ii) public notice of the occurrence of a Change of Control or the intention by the Issuer to effect a Change of Control (which period shall be extended so long as the rating of the Notes is under publicly announced consideration for a possible downgrade by any of the Rating Agencies) (the “Trigger Period”), (a) if two or more Rating Agencies are providing a rating for the Notes at the commencement of any Trigger Period, the rating of the Notes shall be reduced by at least two Rating Agencies and the Notes shall be rated below Investment Grade by each of such Rating Agencies or (b) if only one Rating Agency is providing a rating for the Notes at the commencement of any Trigger Period, the rating of the Notes shall be reduced by such Rating Agency and the Notes shall be rated below Investment Grade by such Rating Agency. Neither the trustee nor the paying agent shall be responsible for monitoring the Issuer’s Investment Grade status or determining whether a Ratings Decline has occurred.

“S&P” means Standard & Poor’s Ratings Services, a division of The McGraw-Hill Companies, Inc., and its successors.

“Voting Stock” with respect to any person, means securities of any class of Capital Stock of such person entitling the holders thereof (whether at all times or only so long as no senior class of stock or other relevant equity interest has voting power by reason of any contingency) to vote in the election of members of the Board of Directors of such person.

On and after the redemption date, interest will cease to accrue on the Notes or any portion thereof called for redemption, unless the Issuer defaults in the payment of the redemption price and accrued interest. On or before the redemption date, the Issuer will deposit with a Paying Agent, or the Trustee, money sufficient to pay the redemption price of and accrued interest on the Notes to be redeemed on such date. If less than all of the Notes are to be redeemed, the Notes to be redeemed shall be selected in accordance with applicable depository procedures.

The Indenture contains provisions permitting the Issuer and the Trustee, with the consent of the holders of not less than 66-2/3% in aggregate principal amount of the Securities at the time outstanding (as defined in the Indenture) of all series to be affected (voting as one class), evidenced as in the Indenture provided, to execute supplemental indentures adding any provisions to or changing in any manner or eliminating any of the provisions of the Indenture or of any supplemental indenture or modifying in any manner the rights of the holders of the Securities of each such series; provided, however, that no such supplemental indenture shall (i) extend the final maturity of any Security, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon, or reduce any amount payable on redemption thereof, or reduce the amount of the principal of an Original Issue Discount Security that would be due and payable upon an acceleration of the maturity thereof pursuant to Section 5.1 of the Indenture or the amount thereof provable in bankruptcy pursuant to Section 5.2 of the Indenture, or impair or affect the right of any Securityholder to institute suit for the payment thereof or the right of repayment, if any, at the option of the Securityholder without the consent of the holder of each Security so affected, or (ii) reduce the aforesaid percentage of Securities of any series, the consent of the holders of which is required for any such supplemental indenture, without the consent of the holder of each Security so affected. Any such consent or waiver by the holder of this Note (unless revoked as provided in the Indenture) shall be conclusive and binding upon such holder and upon all future holders and owners of this Note and any Notes which may be issued in exchange or substitution therefor, irrespective of whether or not any notation thereof is made upon this Note or such other Notes.

No reference herein to the Indenture and no provision of this Note or of the Indenture shall alter or impair the obligation of the Issuer, which is absolute and unconditional, to pay the principal of and any premium and interest on this Note at the place, at the respective times, at the rate and in the coin, currency or currency unit herein prescribed unless in accordance with Section 10.1(c) or Section 10.2 of the Indenture the Issuer shall have: (i) irrevocably deposited or caused to be deposited in trust with the Trustee funds in cash and/or U.S. Government Obligations (as defined in the Indenture) as will be sufficient to pay interest due or to become due on the Notes to, and to pay the principal and any premium due on the Notes upon the Maturity Date or upon earlier redemption; and (ii) delivered to the Trustee an opinion of counsel to the effect that the holders of the Notes will not recognize income, gain, or loss for federal

income tax purposes as a result of such defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such defeasance had not occurred.

The Issuer shall be deemed to have paid the principal of, premium, if any, and interest on the Notes when the same shall have become due and payable if in accordance with Section 10.1(c) or Section 10.2(A) of the Indenture the Issuer shall have: (i) irrevocably deposited or caused to be deposited in trust with the Trustee funds in cash and/or Foreign Government Securities (as defined in the Indenture) as will be sufficient (solely with respect to Section 10.2(A)(2) and Section 10.2(A)(3) of the Indenture, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee) to pay interest due or to become due on the Notes to, and to pay the principal and any premium due on the Notes upon the Maturity Date or upon earlier redemption of the outstanding Notes; and (ii) delivered to the Trustee an opinion of counsel to the effect that the holders of the Notes will not recognize income, gain, or loss for federal income tax purposes as a result of such defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such defeasance had not occurred.

The Notes are issuable in fully registered form without coupons in the minimum denomination of €100,000, and in integral multiples of €1,000 in excess thereof. Upon due presentment for registration of transfer of this Note at the office of the Paying Agent or at such other office or agency as is designated by the Issuer, a new Note or Notes of authorized denominations for an equal aggregate principal amount and like tenor will be issued to the transferee in exchange therefor, subject to the limitations provided in the Indenture, without charge except for any tax or other governmental charge imposed in connection therewith; provided, however, that this Note is exchangeable only if (i) the Depository notifies the Issuer that it is unwilling or unable to continue as Depository for this Note or if at any time the Depository ceases to be in good standing under the Securities Exchange Act of 1934 (the “Exchange Act”), as amended, or other applicable statutes or regulations, and the Issuer does not appoint a successor Depository within 90 days after the Issuer received such notice or becomes aware of such ineligibility or (ii) the Issuer in its sole discretion determines that this Note shall be exchanged for certificated Notes in definitive form, provided that the definitive Notes so issued in exchange for this Note shall be in authorized denominations and be of like aggregate principal amount and tenure and terms as the portion of this Note to be exchanged.

The Issuer will pay any administrative costs imposed by banks in connection with making payments on this Note by wire transfer, but any tax, assessment or governmental charge imposed upon payments will be borne by the holder hereof.

The Issuer, the Trustee and any agent of the Issuer or the Trustee may deem and treat the registered holder hereof as the absolute owner of this Note (whether or not this Note shall be overdue and notwithstanding any notation of ownership or other writing hereon) for the purpose of receiving payment of or on account of the principal hereof and premium, if any, and subject to the provisions on the face hereof, interest hereon, and for all other purposes, and neither the Issuer nor the Trustee nor any agent of the Issuer or the Trustee shall be affected by any notice to

the contrary. Neither the Trustee nor the Paying Agent shall act as the exchange rate agent or have any responsibility for effecting any foreign currency conversions or calculations hereunder.

No recourse under or upon any obligation, covenant or agreement contained in the Indenture or in any Note, or because of any indebtedness evidenced thereby, shall be had against any incorporator, stockholder, officer or director, as such, of the Issuer or of any successor, either directly or through the Issuer or any successor, under any rule of law, statute or constitutional provision or by the enforcement of any assessment or by any legal or equitable proceeding or otherwise, all such liability being expressly waived and released by the acceptance hereof and as part of the consideration for the issue hereof.

Undefined terms used herein which are defined in the Indenture shall have the respective meanings assigned thereto in the Indenture.

THIS NOTE SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK.

ABBREVIATIONS

The following abbreviations, when used in the inscription on the face of this Note, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM — as tenants in common
TEN ENT — as tenants by the entirety
JT TEN — as joint tenants with right of survivorship and not as tenants in common

UNIF GIFT MIN ACT — Custodian
(Cust) (Minor)
under Uniform Gifts to Minors Act
(State)

Additional abbreviations may also be used though not in the above list

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto

PLEASE INSERT TAXPAYER IDENTIFICATION NUMBER OF ASSIGNEE

PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS OF ASSIGNEE

the within Note of AIR PRODUCTS AND CHEMICALS, INC. and hereby does irrevocably constitute and appoint

Attorney to transfer the said Note on the books of the within-named Issuer, with full power of substitution in the premises.

Dated _____

NOTICE: The signature to this assignment must correspond with the name as written upon the face of the certificate in every particular, without alteration or enlargement or any change whatever.



Law Group
Air Products and Chemicals, Inc.
7201 Hamilton Boulevard
Allentown, PA 18195-1501
Tel (610) 481-7351
Fax (610) 481-8223

Ann E. Padjen
Senior Corporate and Finance Counsel

Ms. Padjen's Direct Dial: (610) 481-3306
Voice Mail: (610) 481-8456, Ext. 13306
e-mail: PADJENAE@AIRPRODUCTS.COM

June 1, 2016

Air Products and Chemicals, Inc.
7201 Hamilton Boulevard
Allentown, Pennsylvania 18195-1501

Re: €350,000,000 Air Products and Chemicals, Inc.
0.375% Notes due 2021 (the "Securities")

Ladies and Gentlemen:

I am Senior Corporate and Finance Counsel to Air Products and Chemicals, Inc., a Delaware corporation (the "Corporation"), and am delivering this opinion in connection with the issuance and sale by the Corporation of the above-defined Securities under the terms of an Indenture dated January 10, 1995 (the "Indenture"), between the Corporation and The Bank of New York Mellon Trust Company, N.A., as successor to U. S. Bank National Association (formerly Wachovia Bank, National Association, and initially First Fidelity Bank, National Association), as trustee (the "Trustee"). The Securities are being offered and sold pursuant to the Registration Statement on Form S-3 (File No. 333-200537) (the "Registration Statement") filed by the Corporation with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"), on November 24, 2014, the form of prospectus included therein, the prospectus supplement subject to completion thereto dated May 24, 2016 and the prospectus supplement thereto dated May 24, 2016 (such prospectus, prospectus supplement subject to completion and prospectus supplement, collectively, the "Prospectus"). The Registration Statement became effective automatically on November 24, 2014. In connection with the issuance and sale of the Securities, the Corporation entered in to an Underwriting Agreement dated May 24, 2016, among the Company and the Underwriters named therein (the "Underwriting Agreement").

I or members of the Corporation's legal staff have reviewed originals or copies, certified or otherwise identified to our satisfaction, of the Registration Statement, the Prospectus, the Officers' Certificate establishing the terms of the Notes (including the form of the Notes attached thereto), the Underwriting Agreement and such other such documents, corporate records, certificates of public officials and officers of the Corporation and other instruments and have considered such matters of law as I have deemed necessary or advisable for the purpose of enabling me to render the following opinion. I have assumed the authority of the Trustee to enter into the Indenture and to authenticate the Notes, the genuineness of all signatures, the authenticity of all documents submitted to me as originals, and the conformity to authentic originals of all documents submitted to me as copies.

Based upon the foregoing, and subject to the qualifications, limitations and assumptions stated herein, in my capacity as Senior Corporate and Finance Counsel to the Corporation, I am of the opinion that the Notes constitute valid and binding obligations of the Company, enforceable in accordance with their terms, except as (a) the enforceability thereof may be limited by bankruptcy, insolvency, reorganization, fraudulent transfer, moratorium or similar laws now or hereinafter in effect relating to or affecting the enforcement of creditors' rights generally and (b) the availability of equitable remedies may be limited by equitable principles of general applicability (regardless of whether considered in a proceeding at law or in equity).

I am admitted to practice in the Commonwealth of Pennsylvania and do not purport to be an expert on or generally familiar with or qualified to render an opinion concerning any law other than the law of such Commonwealth. In addition, I have reviewed and am therefore generally familiar with the general corporate law of the State of Delaware. The opinions expressed above are limited to the laws of the Commonwealth of Pennsylvania and the General Corporation Law of the State of Delaware and I express no opinion concerning the laws of any other jurisdiction. This opinion is given as of the date hereof; I do not undertake to advise you of any facts that come to my attention, or of any change in law that may occur, after the date hereof.

I hereby consent to the filing of this opinion as an exhibit to the Current Report on Form 8-K dated the date hereof filed by the Corporation and incorporated by reference into the Registration Statement and to the reference to my name under the caption "Legal Opinions" in the Prospectus, which is a part of the Registration Statement. In giving this consent, I do not admit that I am in the category of persons whose consent is required under Section 7 of the Securities Act.

Sincerely,

/s/ Ann E. Padjen
Ann E. Padjen