

Registration No: \_\_\_\_\_

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM S-8

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)

23-1274455

(I.R.S. Employer Identification No.)

7201 Hamilton Boulevard, Allentown, Pennsylvania 18195-1501

(Address of Principal Executive Offices) (Zip Code)

The Air Products Group Limited Share Incentive Plan

(Full Title of the Plans)

W. Douglas Brown, Vice President, General Counsel and Secretary  
Air Products and Chemicals, Inc.,  
7201 Hamilton Boulevard, Allentown, PA 18195-1501

(Name and Address of Agent for Service)

610-481-4911

(Telephone Number, Including Area Code, of Agent for Service)

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered	Proposed maximum offering price per share	Proposed maximum aggregate offering price	Amount of registration fee(1)
Common Stock, par value \$1	36,000	N/A	\$1,901,880	\$153.86

(1) The registration fee with respect to these shares has been computed in accordance with paragraphs (c) and (h) of Rule 457, based upon the average of the reported high and low sale prices of shares of Common Stock on 5 January 2004 (i.e., \$52.83 per share).

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

ITEM 1. PLAN INFORMATION. (2)

ITEM 2. REGISTRANT INFORMATION AND EMPLOYEE PLAN ANNUAL INFORMATION. (2)

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

The documents listed in clauses (a), (b) and (c) below are incorporated herein by this reference thereto, and all documents subsequently filed by the registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by this reference in this registration statement and to be a part hereof from the date of filing of such documents.

(a) The registrant's Annual Report on Form 10-K for the year ended September 30, 2003.

(b) All other reports filed by the registrant pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the registrant document referred to in (a) above.

(c) The description of the Common Stock contained in the registration statement filed by the registrant to register such securities under Section 12 of the Securities Exchange Act of 1934, including any amendment or report filed for the purpose of updating such description.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this registration statement shall be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement contained in this registration statement or in any other contemporaneously or subsequently filed document which also is or is deemed to be incorporated by reference in this registration statement modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed,

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(2) The information called for by Part I of Form S-8 is currently included in the registrant's Prospectus for the Air Products Group Limited U.K. Share Incentive Plan. Pursuant to the Note to Part I of Form S-8, this information is not being filed with or included in this Form S-8.

except as so modified or superseded, to constitute a part of this registration statement.

ITEM 4. DESCRIPTION OF SECURITIES.

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL.

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145 of the Delaware Corporation Law gives corporations the power to indemnify officers and directors under certain circumstances.

Article Ninth of the registrant's Restated Certificate of Incorporation, as amended, contains provisions which provide for indemnification of certain persons (including officers and directors). The Restated Certificate of Incorporation, and its amendment, are filed as an exhibit to the registrant's Annual Report on Form 10-K for the fiscal years ended September 30, 1987 and September 30, 1996, respectively.

The registrant maintains insurance that generally insures the officers and directors of the registrant and its subsidiaries (as defined in said policy) against liabilities incurred in such capacities, and insures the registrant with respect to amounts to which officers and directors become entitled as indemnification payments from the registrant, subject to certain specified exclusions and deductible and maximum amounts. The registrant also maintains a policy of insurance that insures, among others, certain officers and directors of the registrant and certain of its subsidiaries against liabilities incurred for Breach of Fiduciary Duty (as defined in said policy) with respect to their performance of their duties and responsibilities in connection with certain pension and retirement plans of the registrant and certain of its subsidiaries, subject to certain specified exclusions and deductible and maximum amounts.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED.

Not applicable.

ITEM 8. EXHIBITS.

- 4.1. By-Laws of the Company. (Filed as Exhibit 3.1 to the Company's Form 8-K Report dated 18 September 1997.)

- 4.2. Restated Certificate of Incorporation of the Company. (Filed as Exhibit 3.2 to the Company's Form 10-K Report for the fiscal year ended 30 September 1987.)
- 4.3. Amendment to the Restated Certificate of Incorporation of the Company dated 25 January 1996. (Filed as Exhibit 3.3 to the Company's Form 10-K Report for the fiscal year ended 30 September 1996.)
- 4.4. Rights Agreement, dated as of 19 March 1998, between the Company and First Chicago Trust Company of New York. (Filed as Exhibit 1 to the Company's Form 8-A Registration Statement dated 19 March 1998, as amended by Form 8-A/A dated 16 July 1998.)
23. Consent of KPMG LLP
- 23A. Consent of Arthur Andersen LLP (omitted pursuant to Rule 437a as described in the Exhibit).
24. Power of Attorney

ITEM 9. UNDERTAKINGS.

- (a) Rule 415 offering.

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 of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the 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 the registration statement; and

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

Provided, however, that paragraphs (1)(i) and 1(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is

contained in periodic reports filed 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.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, 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.

(b) Filings incorporating subsequent Exchange Act Documents by Reference.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 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.

(h) Filing of Registration Statement on Form S-8.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described under Item 6 above, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liability (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 of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

The Registrant. 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-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Township of Upper Macungie, Commonwealth of Pennsylvania, on this 9th day of January 2004.

AIR PRODUCTS AND CHEMICALS, INC.  
(Registrant)

By /s/ W. Douglas Brown

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W. Douglas Brown\*  
Vice President, General Counsel  
and Secretary

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\* W. Douglas Brown, Vice President, General Counsel and Secretary, by signing his name hereto, signs this registration statement on behalf of the registrant and, for each of the persons indicated by asterisk on pages 6 and 7 hereof, pursuant to a power of attorney duly executed by such persons, which is filed with the Securities and Exchange Commission herewith.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the date indicated.

Signature -----	Title -----	Date -----
/s/ John P. Jones III ----- John P. Jones III	Director, Chairman of the Board, President, and Chief Executive Officer (Principal Executive Officer)	9 January 2004
/s/ John R. Owings ----- John R. Owings	Vice President and Chief Financial Officer (Principal Financial Officer)	9 January 2004
/s/ Paul E. Huck ----- Paul E. Huck	Vice President and Corporate Controller (Principal Accounting Officer)	9 January 2004
* ----- Mario L. Baeza	Director	9 January 2004
* ----- Michael J. Donahue	Director	9 January 2004
* ----- Ursula F. Fairbairn	Director	9 January 2004
* ----- W. Douglas Ford	Director	9 January 2004
* ----- Edward E. Hagenlocker	Director	9 January 2004
* ----- James F. Hardymon	Director	9 January 2004

Signature

Title

Date

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Director

9 January 2004

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Terrence Murray

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Director

9 January 2004

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Charles H. Noski

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Director

9 January 2004

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Paula G. Rosput

\*

Director

9 January 2004

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Lawrason D. Thomas



EXHIBIT INDEX

Exhibit	Page
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4.1 By-Laws of the Company. (Filed as Exhibit 3.1 to the Company's Form 8-K Report dated 18 September 1997.)	N/A
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4.3 Amendment to the Restated Certificate of Incorporation of the Company dated 25 January 1996. (Filed as Exhibit 3.3 to the Company's Form 10-K Report for the fiscal year ended 30 September 1996.)	N/A
4.4 Rights Agreement, dated as of 19 March 1998, between the Company and First Chicago Trust Company of New York. (Filed as Exhibit I to the Company's Form 8-A Registration Statement dated 19 March 1998, as amended by Form 8-A/A dated 16 July 1998.)	N/A
23. Consent of KPMG LLP	9
23A. Consent of Arthur Andersen LLP (omitted pursuant to Rule 437a as described in the Exhibit)	10
24. Power of Attorney	11

No opinion of counsel is being filed because the Common Stock to be distributed in connection with the Plan will consist exclusively of previously issued shares that are purchased by the Plan Trustee in the open market and will not constitute original issuance shares; further, no opinion is being furnished with respect to ERISA compliance because the Plan covered by the registration statement is not subject to the requirements of ERISA.

KPMG LLP

Independent Auditors' Consent

To the Shareholders and Board of Directors  
Air Products and Chemicals, Inc.:

We consent to the use of our report dated 24 October 2003, with respect to the consolidated balance sheets of Air Products and Chemicals, Inc. and subsidiaries as of 30 September 2003 and 2002, and the related consolidated statements of income, cash flows and shareholders' equity for the years then ended, incorporated herein by reference.

Our report contains an explanatory paragraph relating to the fact that the financial statements of Air Products and Chemicals, Inc. and subsidiaries for the year ended 30 September 2001 were audited by other auditors who have ceased operations. As described in Note 1 to the financial statements, those financial statements have been revised. We audited the adjustments described in Note 1 that were applied to revise the 2001 financial statements. In addition, as described in Note 10, the financial statements have been revised to include the transitional disclosures required by Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets," which was adopted as of 1 October 2001. However, we were not engaged to audit, review, or apply any procedures to the 2001 financial statements of Air Products and Chemicals, Inc. and subsidiaries other than with respect to such adjustments and disclosures, and, accordingly, we do not express any opinion or any other form of assurance on the 2001 financial statements taken as a whole.

Philadelphia, Pennsylvania  
5 January 2004

## Consent of Arthur Andersen LLP

The Company's financial statements for the year ended September 30, 2001, incorporated herein by reference to the Company's Annual Report on Form 10-K for the year ended September 30, 2003, were audited by Arthur Andersen LLP ("Andersen"). Subsequently, Andersen was dismissed as the Company's independent auditors.

Section 11(a) of the Securities Act of 1933 (the "Act") provides that in case any part of a registration statement, at the time it became effective, contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein not misleading, any person acquiring a security pursuant to the registration statement (unless at the time of such acquisition he knew of the untruth or omission) may sue, among others, any accountant who has consented to be named in the registration statement as having prepared or certified such part of the registration statement. After reasonable efforts, the Company has been unable to obtain the consent of Andersen to the incorporation by reference in this Registration Statement of Andersen's reports on its audit of the Company's financial statements referred to above. Under these circumstances, Rule 437a under the Act permits the Company to file this Registration Statement without such consents. Without such consents, a person acquiring shares of the Company pursuant to this Registration Statement will be unable to assert a claim against Andersen under Section 11(a) of the Act in the event of an untrue statement of material fact or a material omission in the financial statements audited by Andersen or in its reports with respect thereto.

## POWER OF ATTORNEY

Know All Men By These Presents, that each person whose signature appears below constitutes and appoints John P. Jones III or John R. Owings or W. Douglas Brown, acting severally, his/her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him/her and in his/her name, place, and stead, in any and all capacities, to sign Form S-3 and S-8 Registration Statements and amendments thereto pertaining to interests in and/or Common Stock offered, issued, sold, or resold under

- - the Air Products and Chemicals, Inc. Long-Term Incentive Plan;
- - the Air Products and Chemicals, Inc. Retirement Savings and Stock Ownership Plan;
- - the Air Products and Chemicals, Inc. Supplementary Savings Plan;
- - the Air Products and Chemicals, Inc. Annual Incentive Plan;
- - the Air Products and Chemicals, Inc. Stock Incentive Program;
- - the Air Products Employee Stock Option Award granted 2 October 1995, the Air Products Employee Stock Option Award granted 1 October 1997 and/or the Air Products Employee Stock Option Award granted 1 October 1999;
- - the Air Products and Chemicals, Inc. Deferred Compensation Plan for Directors and/or the Air Products and Chemicals, Inc. Stock Option Plan for Directors;
- - the Air Products PLC U.K. Savings-Related Share Option Scheme and/or the Air Products Group Limited U.K. Savings-Related Share Option Scheme;
- - the Investors Choice Dividend Reinvestment and Direct Stock Purchase and Sale Plan for Shareholders of Air Products and Chemicals, Inc.;
- - the Air Products and Chemicals, Inc. Flexible Employee Benefits Trust Agreement, dated December 29, 1993 as it may be amended from time to time;
- - the Amended and Restated Trust Agreement for the Air Products and Chemicals, Inc. Supplementary Pension Plan and certain other defined benefit pension agreements including the directors pension plan, dated August 1, 1999, as it may be as amended from time to time;
- - the Amended and Restated Trust Agreement for the Air Products and Chemicals, Inc. Supplementary Savings Plan and the Deferred Compensation Plan for Directors, dated August 1, 1999, as it may be amended from time to time;

- - the Amended and Restated Trust Agreement for the Stearns Catalytic World Corporation Supplementary Retirement Plan, dated August 1, 1999, as it may be amended from time to time;
- - the Air Products Group Limited Share Incentive Plan; and
- - any other plan, program, or award (together with all of the foregoing, the "Plans") of Air Products and Chemicals, Inc. or its subsidiaries existing from time to time which involves Common Stock,

which Registration Statements may be required under applicable law for (i) the registration of interests in and/or Common Stock for issuance under any of such Plans as may be necessary from time to time in accordance with the provisions of such Plans, (ii) amendments to said Plans heretofore or hereafter approved or established by or through authority delegated from the Board or the appropriate committee of the Board, by Air Products PLC, by Air Products Group Limited, or by the Plan Administrator, (iii) the sale or transfer from time to time by the Trustee or Trustees and/or the Company to the public and/or to Plan Participants, and/or to pay Plan obligations (as such terms are defined in the relevant Trust Agreement) payable in cash or Common Stock and/or to fund the Trust with cash as required by the Trust Agreements, or (iv) any fundamental change in the information contained in such Registration Statements, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he/she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Power of Attorney has been signed below by the following persons in the capacities and on the dates indicated.

SIGNATURE  
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TITLE  
-----

DATE  
----

/s/ John P. Jones III

Director, Chairman of the Board, Chief  
Executive Officer and Employee Benefit Plans  
Committee Member  
(Principal Executive Officer)

November 20, 2003

-----  
John P. Jones III

SIGNATURE  
-----

TITLE  
-----

DATE  
-----

/s/ Mario L. Baeza ----- Mario L. Baeza	Director	November 20, 2003
/s/ Michael J. Donahue ----- Michael J. Donahue	Director	November 20, 2003
/s/ Ursula F. Fairbairn ----- Ursula F. Fairbairn	Director	November 20, 2003
/s/ W. Douglas Ford ----- W. Douglas Ford	Director	November 20, 2003
/s/ Edward E. Hagenlocker ----- Edward E. Hagenlocker	Director	November 20, 2003
/s/ James F. Hardymon ----- James F. Hardymon	Director	November 20, 2003
/s/ Terrence Murray ----- Terrence Murray	Director	November 20, 2003
/s/ Charles H. Noski ----- Charles H. Noski	Director	November 20, 2003
/s/ Paula G. Rosput ----- Paula G. Rosput	Director	November 20, 2003
/s/ Lawrason D. Thomas ----- Lawrason D. Thomas	Director	November 20, 2003