

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)

Air Products and Chemicals, Inc. Retirement Savings and Stock Ownership Plan
 (Full Title of the Plan)

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	7,200,000	\$45.185	\$325,332,000	\$29,930.54

In addition, pursuant to Rule 416(c) under the Securities Act of 1933, this registration statement also covers an indeterminate amount of interests to be offered or sold pursuant to the employee benefit plan described herein.

(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 9 September 2002 (i.e., \$45.185 per share).

Air Products and Chemicals, Inc. (the "Company"), by the filing of this Registration Statement, hereby registers additional shares of common stock of the Company for offer and sale pursuant to the Retirement Savings and Stock Ownership Plan (the "Plan"), together with additional interests to be offered and sold pursuant to the Plan. These are securities of the same class as the securities registered for offer and sale pursuant to the Plan under the Registration Statements on Form S-8 referenced below, the contents of which are incorporated herein by reference:

NUMBER -----	DATE FILED -----
333-90773	November 12, 1999
333-36231	September 24, 1997
033-57017	December 22, 1994
033-49981	August 13, 1993
033-31195	October 12, 1989

ITEM 8. EXHIBITS.

23. Consents of Arthur Andersen LLP (omitted pursuant to Rule 437a as described in the Exhibit Index for the Registration Statement)
24. Power of Attorney

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 City of Allentown, Commonwealth of Pennsylvania, on this 13th day of September 2002.

AIR PRODUCTS AND CHEMICALS, INC.
(Registrant)

By: /s/ W. Douglas Brown

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

* 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 3, 4, and 5 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)	13 September 2002
/s/ John R. Owings ----- John R. Owings	Vice President and Chief Finance Officer (Principal Financial Officer)	13 September 2002
/s/ Paul E. Huck ----- Paul E. Huck	Vice President and Corporate Controller (Principal Accounting Officer)	13 September 2002
* ----- Mario L. Baeza	Director	13 September 2002
* ----- L. Paul Bremer III	Director	13 September 2002
* ----- Michael J. Donahue	Director	13 September 2002
* ----- Ursula F. Fairbairn	Director	13 September 2002
* ----- Edward E. Hagenlocker	Director	13 September 2002
* ----- James F. Hardymon	Director	13 September 2002

Signature -----	Title -----	Date -----
* Terry R. Lautenbach	Director	13 September 2002
Terrence Murray	Director	13 September 2002
* Charles H. Noski	Director	13 September 2002
* Paula G. Rosput	Director	13 September 2002
* Lawrason D. Thomas	Director	13 September 2002

The Plan. Pursuant to the requirements of the Securities Act of 1933, the Air Products and Chemicals, Inc. Retirement Savings and Stock Ownership Plan has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Allentown, Commonwealth of Pennsylvania, on 13 September 2002.

AIR PRODUCTS AND CHEMICALS, INC.
RETIREMENT SAVINGS AND STOCK
OWNERSHIP PLAN
(The Plan)

By /s/ L. V. Broese van Groenou

L. V. Broese van Groenou
Employee Benefit Plans Committee Member

By /s/ W. D Brown

W. D. Brown
Employee Benefit Plans Committee
Chairman and Member

By /s/ J. P. Jones III

J. P. Jones III
Employee Benefit Plans Committee Member

By /s/ J. R. Owings

J. R. Owings
Employee Benefit Plans Committee Member

As filed with the Securities and Exchange Commission on 13 September 2002
Registration No.

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

EXHIBITS

TO

FORM S-8

REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933

AIR PRODUCTS AND CHEMICALS, INC.

RETIREMENT SAVINGS AND STOCK OWNERSHIP PLAN

6

23. Consent of Arthur Andersen LLP

The Company's financial statements as of September 30, 2001 and 2000 and for the three years ended September 30, 2001 incorporated herein by reference to the Company's Annual Report on Form 10-K for the year ended September 30, 2001 and the Plan's financial statements as of September 30, 2001 and 2000 incorporated herein by reference to the Company's Form 10K/A, were audited by Arthur Andersen LLP ("Andersen"). Subsequently, Andersen was dismissed as the Company's and as the Plan'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 and of the Plan's financial statements referred to above. Under these circumstances, Rule 437a under the Securities Act permits the Company and the Plan 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.

24. Power of Attorney

No opinion of counsel is being filed because the Common Stock, if any, to be distributed in connection with the Plan will consist exclusively of previously issued shares including shares that are presently held by the Company in treasury or under the Air Products and Chemicals, Inc. Flexible Employee Benefits Trust (which was created to provide for the satisfaction of certain obligations of the Company and its affiliates under various employee plans, including the Plan) and will not constitute original issuance shares; further, no opinion is being furnished with respect to ERISA compliance because the Company has undertaken in Registration Statement No. 33-49981, filed with the Securities and Exchange Commission on Form S-8 on August 13, 1993, that it has submitted and will submit the Plan and any amendment thereto to the Internal Revenue Service (the "IRS") in a timely manner and has made and will make all changes required by the IRS in order to qualify the Plan, said Registration Statement No. 33-49981 having been incorporated by reference herein.

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints JOHN P. JONES III or LEO J. DALEY or W. DOUG 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 (formerly the 1997 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 Direct Investment Program 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; 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 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 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 -----	TITLE -----	DATE -----
/s/ John P. Jones III ----- John P. Jones III	Director, Chairman of the Board, Chief Executive Officer and Employee Benefit Plans Committee Member (Principal Executive Officer)	November 15, 2001
/s/ Mario L. Baeza ----- Mario L. Baeza	Director	November 15, 2001
/s/ L. Paul Bremer III ----- L. Paul Bremer III	Director	November 15, 2001

/s/ Robert Cizik ----- Robert Cizik	Director	November 15, 2001
/s/ Michael J. Donahue ----- Michael J. Donahue	Director	November 15, 2001
/s/ Ursula F. Fairbairn ----- Ursula F. Fairbairn	Director	November 15, 2001
/s/ Edward E. Hagenlocker ----- Edward E. Hagenlocker	Director	November 15, 2001
/s/ James F. Hardymon ----- James F. Hardymon	Director	November 15, 2001
/s/ Terry R. Lautenbach ----- Terry R. Lautenbach	Director	November 15, 2001
/s/ Charles H. Noski ----- Charles H. Noski	Director	November 15, 2001
/s/ Paula G. Rosput ----- Paula G. Rosput	Director	November 15, 2001
/s/ Lawrason D. Thomas ----- Lawrason D. Thomas	Director	November 15, 2001