AIR PRODUCTS & CHEMICALS INC /DE/ Form S-8 March 22, 2005 As filed with the Securities and Exchange Commission on March 22, 2005

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. Long-Term Incentive 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

_____ _____ Proposed maximumProposed maximumTitles of securitiesAmount to beoffering price peraggregate offering

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Amount

to be registered	registered	share	price	registrat
Common Stock, par value \$1	609,563	\$63.82	\$38,902,310.66	\$4,5
 Options Granted, 10/01/04	2,565,500	\$54.17	\$138,973,135.00	\$16,3
Options Granted, 01/27/05	18,000	\$57.74	\$1,039,320.00	\$1
	3,193,063			\$21,0

- (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 sales prices of shares of Common Stock on 15 March 2005 (i.e., \$63.82 per share.
- (2) The registration fee with respect to these shares has been computed in accordance with paragraph (h) of Rule 457 based upon the stated exercise price of the Options.

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 distribution pursuant to the Long-Term Incentive Plan (the "Plan"). These are securities of the same class as the securities registered on Form S-8, Registration Statement No. 333-103809 for distribution pursuant to the Plan. Accordingly, the contents of Registration Statement No. 333-103809 are incorporated herein by reference. The Company's report on Form 10-K for the year ended 30 September 2004 and the Form 10-Q for the period ended 31 December 2004 are also incorporated herein by reference.

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 Independent Registered Public Accounting Firm
- 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 22nd day of March 2005.

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 and 4 hereof, pursuant to a power of attorney duly executed by such persons which is filed with the Securities and Exchange Commission herewith.

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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)	22 March 2005
/s/ Paul E. Huck Paul E. Huck	Vice President and Chief Financial Officer (Principal Financial Officer and Accounting Officer)	22 March 2005
* Mario L. Baeza *	Director	22 March 2005

Michael J. Donahue	Director	22 March 2005
*		
Ursula F. Fairbairn	Director	22 March 2005
*		
W. Douglas Ford	Director	22 March 2005
*		
Edward E. Hagenlocker	Director	22 March 2005
*		
James F. Hardymon	Director	22 March 2005
*		
Terrence Murray	Director	22 March 2005
	2	
	3	
Signature	Title	Date
*		
Lawrence S. Smith	Director	22 March 2005
*		
Lawrason D. Thomas	Director	22 March 2005
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EXHIBIT INDEX

Exhibit

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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 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.)	N/A
23.	Consent of Independent Registered Public Accounting Firm	6
24.	Power of Attorney	7
in conne	on of counsel is being filed because the Common Stock to be distributed ction with the Plan will consist exclusively of previously issued shares presently held by the registrant as treasury shares 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.

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