W R GRACE & CO
Form SC 13G
August 23, 2007

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G
Rule 13d-1 and 13d-2
Under the Securities Exchange Act of 1934

W. R. Grace & Co.
(Name of Issuer)

Common Stock
(Title of Class of Securities)

38388F108
(CUSIP Number)

8/17/2007
(Date of Event which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

| | Rule 13d-1 (b)
|X| Rule 13d-1 (c)
| | Rule 13d-1 (d)

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

(1) Names and I.R.S. Identification Nos.(entities only) of reporting persons.

Caxton International Limited

(2) Check the appropriate box if a member of a group (see instructions) (a)|_|
(b)|X|

(3) SEC use only.

(4) Citizenship or place of organization.
British Virgin Islands

Number of shares beneficially owned by each reporting person with:

(5) Sole voting power:
0

(6) Shared voting power:

929,720

(7) Sole dispositive power:
0

(8) Shared dispositive power:
929,720

(9) Aggregate amount beneficially owned by each reporting person.
929,720

(10) Check if the aggregate amount in Row (9) excludes certain shares |_|
(see instructions).

(11) Percent of class represented by amount in Row 9.
1.3%

(12) Type of reporting person (see instructions).
CO

(1) Names and I.R.S. Identification Nos.(entities only) of reporting persons.

Caxton Equity Growth Holdings L.P.
20-5043874

(2) Check the appropriate box if a member of a group (see instructions) (a)|_|
(b)|X|

(3) SEC use only.

(4) Citizenship or place of organization.
Bermuda

Number of shares beneficially owned by each reporting person with:

(5) Sole voting power:
0

(6) Shared voting power:
494,782

(7) Sole dispositive power:
0

(8) Shared dispositive power:
494,782

(9) Aggregate amount beneficially owned by each reporting person.
494,782

(10) Check if the aggregate amount in Row (9) excludes certain shares |_|
(see instructions).

(11) Percent of class represented by amount in Row 9.
0.7%

(12) Type of reporting person (see instructions).
PN

(1) Names and I.R.S. Identification Nos.(entities only) of reporting persons.

Caxton Alpha Equity Holdings LP

(2) Check the appropriate box if a member of a group (see instructions) (a)|_|
(b)|X|

(3) SEC use only.

(4) Citizenship or place of organization.
Delaware

Number of shares beneficially owned by each reporting person with:
(5) Sole voting power:
0

(6) Shared voting power:
1,643,096

(7) Sole dispositive power:
0

(8) Shared dispositive power:
1,643,096

(9) Aggregate amount beneficially owned by each reporting person.
1,643,096

(10) Check if the aggregate amount in Row (9) excludes certain shares (see instructions). |_|

(11) Percent of class represented by amount in Row 9.
2.3%

(12) Type of reporting person (see instructions).
PN

(1) Names and I.R.S. Identification Nos.(entities only) of reporting persons.

SGAM AI Equity Fund - Caxton Equity

(2) Check the appropriate box if a member of a group (see instructions) (a)|_|
(b)|X|

(3) SEC use only.

(4) Citizenship or place of organization.
Luxembourg

Number of shares beneficially owned by each reporting person with:

(5) Sole voting power:
0

(6) Shared voting power:
628,438

(7) Sole dispositive power:
0

(8) Shared dispositive power:
628,438

(9) Aggregate amount beneficially owned by each reporting person.
628,438

(10) Check if the aggregate amount in Row (9) excludes certain shares |_|
(see instructions).

(11) Percent of class represented by amount in Row 9.
0.9%

(12) Type of reporting person (see instructions).
OO

(1) Names and I.R.S. Identification Nos.(entities only) of reporting persons.

Caxton Associates, L.L.C.
22-3430173

(2) Check the appropriate box if a member of a group (see instructions) (a)|_|
(b)|X|

(3) SEC use only.

(4) Citizenship or place of organization.
Delaware

Number of shares beneficially owned by each reporting person with:
(5) Sole voting power:
0

(6) Shared voting power:
3,696,036

(7) Sole dispositive power:
0

(8) Shared dispositive power:
3,696,036

(9) Aggregate amount beneficially owned by each reporting person.
3,696,036

(10)Check if the aggregate amount in Row (9) excludes certain shares |_|
(see instructions).

(11)Percent of class represented by amount in Row 9.
5.2%

(12)Type of reporting person (see instructions).
IA

(1) Names and I.R.S. Identification Nos.(entities only) of reporting persons.
Kovner, Bruce

(2) Check the appropriate box if a member of a group (see instructions) (a)|_|
(b)|X|

(3) SEC use only.

(4) Citizenship or place of organization.
United States

Number of shares beneficially owned by each reporting person with:
(5) Sole voting power:
0

(6) Shared voting power:
3,696,036

(7) Sole dispositive power:
0

(8) Shared dispositive power:
3,696,036

(9) Aggregate amount beneficially owned by each reporting person.
3,696,036

(10) Check if the aggregate amount in Row (9) excludes certain shares |_|
(see instructions).

(11) Percent of class represented by amount in Row 9.
5.2%

(12) Type of reporting person (see instructions).
IN

Item 1(a). Name of Issuer:
W. R. Grace & Co.

Item 1(b). Address of Issuer's Principal Executive Offices:
7500 Grace Drive
Columbia, MD 21044

Item 2(a). Name of Person Filing:
(i) Caxton International Limited ("Caxton International")
(ii) Caxton Equity Growth Holdings L.P. ("Caxton Equity Growth")
(iii) Caxton Alpha Equity Holdings LP ("Caxton Alpha")
(iv) SGAM AI Equity Fund - Caxton Equity ("SGAM AI Equity")
(v) Caxton Associates, L.L.C. ("Caxton Associates"). Caxton Associates is the trading advisor to Caxton International and Caxton Equity Growth, the general partner of Caxton Alpha, and the sub-investment manager for SGAM AI Equity (the "Caxton Accounts") and as such, has voting and dispositive power with respect to the investments of the Caxton Accounts.
(vi) Mr. Bruce S. Kovner. Mr. Kovner is the Chairman of Caxton Associates and the sole shareholder of Caxton Corporation, the manager and majority owner of Caxton Associates. As a result of the foregoing, Mr. Kovner may be deemed beneficially to own the securities of the Issuer owned by the Caxton Accounts.

Item 2(b). Address or Principal Business Office or, If None, Residence:
(i) The address of Caxton International is c/o Prime Management Limited, Mechanics Building, 12 Church Street, Hamilton HM11, Bermuda.
(ii) The address of Caxton Equity Growth is c/o Wakefield Quin, Chancery Hall, 52 Reid Street, Hamilton HM12, Bermuda.
(iii) The address of Caxton Alpha is c/o Caxton Associates, Princeton Plaza, Building 2, 731 Alexander Road, Princeton, NJ 08540.
(iv) The address of SGAM AI Equity is 16 Boulevard Royal, L-2449 Luxembourg.
(v) The address of Caxton Associates is Princeton Plaza, Building 2, 731 Alexander Road, Princeton, NJ 08540.

(vi) The business address of Mr. Kovner is 500 Park Avenue, New York, NY 10022.

Item 2(c). Citizenship:
(i) Caxton International is a British Virgin Islands corporation.
(ii) Caxton Equity Growth is a Bermuda limited partnership.
(iii) Caxton Alpha is a Delaware limited partnership.
(iv) SGAM AI Equity is a sub-fund of a Societe d'Investissement a Capital Variable organized under the laws of the Grand Duchy of Luxembourg.
(v) Caxton Associates is a Delaware limited liability company.
(vi) Mr. Kovner is a United States citizen.

Item 2(d). Title of Class of Securities:
Common Stock

Item 2(e). CUSIP No.:
38388F108

Item 3. If This Statement is Filed Pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing is a:
Not Applicable

If this statement is filed pursuant to Rule 13d-1(c), check this box. |X|

Item 4. Ownership

(a) Amount beneficially owned:
(i) The amount of shares of Common Stock beneficially owned by Caxton International is 929,720.
(ii) The amount of shares of Common Stock beneficially owned by Caxton Equity Growth is 494,782.
(iii) The amount of shares of Common Stock beneficially owned by Caxton Alpha is 1,643,096.
(iv) The amount of shares of Common Stock beneficially owned by SGAM AI Equity is 628,438.
(v) The amount of shares of Common Stock considered to be beneficially owned by Caxton Associates by reason of its voting and dispositive powers is 3,696,036.
(vi) Mr. Kovner, by reason of being Chairman of Caxton Associates and the sole shareholder of Caxton Corporation, the manager and majority owner of Caxton Associates, may also be deemed to beneficially own the securities of the Issuer owned by the Caxton Accounts.

(b) Percent of class:
(i) Caxton International beneficially owns 1.3% of the Class of Common Stock.
(ii) Caxton Equity Growth beneficially owns 0.7% of the Class of Common Stock.
(iii) Caxton Alpha beneficially owns 2.3% of the Class of Common Stock.
(iv) SGAM AI Equity beneficially owns 0.9% of the Class of Common Stock.
(v) Caxton Associates is deemed to beneficially own 5.2% of the Class of Common Stock.
(vi) Mr. Kovner may be deemed to beneficially own 5.2% of the Class of Common Stock.

(c) Number of shares as to which Caxton International has:
(i) Sole power to vote or to direct the vote: 0
(ii) Shared power to vote or to direct the vote: 929,720

(iii) Sole power to dispose or to direct the disposition: 0
(iv) Shared power to dispose or to direct the disposition of: 929,720

Number of shares as to which Caxton Equity Growth has:
(i) Sole power to vote or to direct the vote: 0
(ii) Shared power to vote or to direct the vote: 494,782
(iii) Sole power to dispose or to direct the disposition: 0
(iv) Shared power to dispose or to direct the disposition of: 494,782

Number of shares as to which Caxton Alpha has:
(i) Sole power to vote or to direct the vote: 0
(ii) Shared power to vote or to direct the vote: 1,643,096
(iii) Sole power to dispose or to direct the disposition of: 0
(iv) Shared power to dispose or to direct the disposition of: 1,643,096

Number of shares as to which SGAM AI Equity has:
(i) Sole power to vote or to direct the vote: 0
(ii) Shared power to vote or to direct the vote: 628,438
(iii) Sole power to dispose or to direct the disposition of: 0
(iv) Shared power to dispose or to direct the disposition of: 628,438

Number of shares as to which Caxton Associates has:
(i) Sole power to vote or to direct the vote: 0
(ii) Shared power to vote or to direct the vote: 3,696,036
(iii) Sole power to dispose or to direct the disposition of: 0
(iv) Shared power to dispose or to direct the disposition of: 3,696,036

Number of shares as to which Mr. Kovner has:
(i) Sole power to vote or to direct the vote: 0
(ii) Shared power to vote or to direct the vote: 3,696,036
(iii) Sole power to dispose or to direct the disposition of: 0
(iv) Shared power to dispose or to direct the disposition of: 3,696,036

Item 5. Ownership of 5 Percent or Less of a Class.

Not Applicable

Item 6. Ownership of More than 5 Percent on Behalf of Another Person.

Not Applicable

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

Not Applicable

Item 8. Identification and Classification of Members of the Group.

Not Applicable

Item 9. Notice of Dissolution of Group.

Not Applicable

Item 10. Certifications

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Caxton International Limited

Date: 8/23/2007

/s/ Joseph Kelly
Name: Joseph Kelly
Title: Vice President and Treasurer

Date: 8/23/2007

/s/ Maxwell Quin
Name: Maxwell Quin
Title: Vice President and Secretary

Caxton Equity Growth Holdings L.P.

Date: 8/23/2007

/s/ Scott B. Bernstein
Name: Scott B. Bernstein
Title: Secretary,
Caxton Associates, L.L.C.,
Manager
Caxton GP Holdings, LLC,
Investment General Partner

Caxton Alpha Equity Holdings LP

Date: 8/23/2007

/s/Scott B. Bernstein
Name: Scott B. Bernstein
Title: Secretary,
Caxton Associates, L.L.C.,
General Partner

SGAM AI Equity Fund - Caxton Equity

Date: 8/23/2007

/s/ Eric Attias
Name: Eric Attias
Title: Director

Caxton Associates, L.L.C.

Date: 8/23/2007

/s/ Scott B. Bernstein
Name: Scott B. Bernstein
Title: Secretary

Date: 8/23/2007

/s/ Bruce S. Kovner
Name: Bruce S. Kovner
Title: signed by Scott B. Bernstein
as Attorney-in-Fact

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative other than an executive officer or general partner of the filing person, evidence of the representative's authority to sign on behalf of such person shall be filed with the statement, provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

ATTENTION: Intentional misstatements or omissions of fact constitute Federal criminal violations (see 18 U.S.C. 1001). (Secs. 3(b), 13(d)(1), 13(d)(2), 13(d)(5), 13(d)(6), 13(g)(1), 13(g)(2), 13(g)(5), 23, 48 Stat. 882, 894, 901; sec. 203(a), 49 Stat. 704; sec. 8, 49 Stat. 1379; sec. 10, 78 Stat. 88a; sec. 2, 82 Stat. 454; secs. 1, 2, 84 Stat. 1497; secs. 3, 10, 18, 89 Stat. 97, 119, 155; secs. 202, 203, 91 Stat. 1494, 1498, 1499; (15 U.S.C. 78c(b), 78m(d)(1), 78m(d)(2), 78m(d)(5), 78m(d)(6), 78m(g)(1), 78m(g)(2), 78m(g)(5), 78w)) [43 FR 18499, Apr. 28, 1978, as amended at 43 FR 55756, Nov. 29, 1978; 44 FR 2148, Jan. 9, 1979; 44 FR 11751, Mar. 2, 1979; 61 FR 49959, Sept. 24, 1996; 62 FR 35340, July 1, 1997; 63 FR 2867, Jan. 16, 1998; 63 FR 15287, Mar. 31, 1998]

Certification

The undersigned hereby certifies that the shares of W. R. Grace & Co. purchased on behalf of Caxton International Limited, Caxton Equity Growth Holdings L.P., Caxton Alpha Equity Holdings LP, and SGAM AI Equity Fund - Caxton Equity, were not acquired and are not being held for the purpose of or with the effect of changing or influencing the control of the issuer of such securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

Date: 8/23/2007

/s/ Kurt Feuerman
Kurt Feuerman

JOINT ACQUISITION STATEMENT
PURSUANT TO RULE 13d-1(k) (1)

The undersigned acknowledge and agree that the foregoing statement on Schedule 13G is filed on behalf of each of the undersigned and that all subsequent amendments to this statement on Schedule 13G shall be filed on behalf of each of the undersigned without the necessity of filing additional joint acquisition statements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning him or it contained therein, but shall not be responsible for the completeness and accuracy of the information concerning the other, except to the extent that he or it knows or has reason to believe that such information is inaccurate.

Date: 8/23/2007

Caxton International Limited

/s/ Joseph Kelly
Name: Joseph Kelly
Title: Vice President and Treasurer

/s/ Maxwell Quin
Name: Maxwell Quin
Title: Vice President and Secretary

Caxton Equity Growth Holdings L.P.

/s/ Scott B. Bernstein
Name: Scott B. Bernstein
Title: Secretary,
Caxton Associates, L.L.C., Manager
Caxton GP Holdings, LLC,
Investment General Partner

Caxton Alpha Equity Holdings LP

/s/Scott B. Bernstein
Name: Scott B. Bernstein
Title: Secretary,
Caxton Associates, L.L.C.,
General Partner

SGAM AI Equity Fund - Caxton Equity

/s/ Eric Attias
Name: Eric Attias
Title: Director

Caxton Associates, L.L.C.

/s/ Scott B. Bernstein
Name: Scott B. Bernstein
Title: Secretary

/s/ Bruce S. Kovner
Name: Bruce S. Kovner
Title: signed by Scott B. Bernstein
as Attorney-in-Fact