

W R GRACE & CO  
Form SC 13G/A  
February 13, 2009

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

SCHEDULE 13G  
(Rule 13d-102)

Information Statement Pursuant to Rules 13d-1 and 13d-2  
Under the Securities Exchange Act of 1934  
(Amendment No. 4)\*

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

Common Stock  
(Title of Class of Securities)

38388F108  
(CUSIP Number)

December 31, 2008  
Date of Event Which Requires Filing of the Statement

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

- Rule 13d-1(b)  
 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).

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1. NAME OF REPORTING PERSON  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
  
Citadel Investment Group, L.L.C.
  2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP  
(a)  x  
(b)  o
  3. SEC USE ONLY
  4. CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware limited liability company
- |                                                                                        |    |                                              |
|----------------------------------------------------------------------------------------|----|----------------------------------------------|
| NUMBER OF<br>SHARES<br>BENEFICIALLY<br>OWNED BY<br>EACH<br>REPORTING<br>PERSON<br>WITH | 5. | SOLE VOTING POWER<br>0                       |
|                                                                                        | 6. | SHARED VOTING POWER<br><br>41 shares         |
|                                                                                        | 7. | SOLE DISPOSITIVE POWER<br>0                  |
|                                                                                        | 8. | SHARED DISPOSITIVE POWER<br>See Row 6 above. |
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
See Row 6 above.
  10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES  
CERTAIN SHARES  o
  11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
  
Approximately 0.0%(1) as of December 31, 2008
  12. TYPE OF REPORTING PERSON  
OO; HC

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<sup>1</sup> Based on 72,157,518 outstanding shares of the Common Stock of Issuer, as reported in the Issuer's Quarterly Report on Form 10-Q for the period ended September 30, 2008, as filed with the Securities Exchange Commission on

November 7, 2008.

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1. NAME OF REPORTING PERSON  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
  
Citadel Investment Group II, L.L.C.
  2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP  
(a)  x  
(b)  o
  3. SEC USE ONLY
  4. CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware limited liability company
- |                                                                                        |    |                                              |
|----------------------------------------------------------------------------------------|----|----------------------------------------------|
| NUMBER OF<br>SHARES<br>BENEFICIALLY<br>OWNED BY<br>EACH<br>REPORTING<br>PERSON<br>WITH | 5. | SOLE VOTING POWER<br>0                       |
|                                                                                        | 6. | SHARED VOTING POWER<br><br>41 shares         |
|                                                                                        | 7. | SOLE DISPOSITIVE POWER<br>0                  |
|                                                                                        | 8. | SHARED DISPOSITIVE POWER<br>See Row 6 above. |
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
See Row 6 above.
  10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES  
CERTAIN SHARES  o
  11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
  
Approximately 0.0%(2) as of December 31, 2008
  12. TYPE OF REPORTING PERSON  
OO; HC



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1. NAME OF REPORTING PERSON  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
  
Citadel Limited Partnership
  2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP  
(a)  x  
(b)  o
  3. SEC USE ONLY
  4. CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware limited partnership
- |                                                                                        |    |                                              |
|----------------------------------------------------------------------------------------|----|----------------------------------------------|
| NUMBER OF<br>SHARES<br>BENEFICIALLY<br>OWNED BY<br>EACH<br>REPORTING<br>PERSON<br>WITH | 5. | SOLE VOTING POWER<br>0                       |
|                                                                                        | 6. | SHARED VOTING POWER<br><br>41 shares         |
|                                                                                        | 7. | SOLE DISPOSITIVE POWER<br>0                  |
|                                                                                        | 8. | SHARED DISPOSITIVE POWER<br>See Row 6 above. |
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
See Row 6 above.
  10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES  
CERTAIN SHARES  o
  11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
  
Approximately 0.0%(3) as of December 31, 2008
  12. TYPE OF REPORTING PERSON  
PN; HC



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1. NAME OF REPORTING PERSON  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
  
Kenneth Griffin
  2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP  
(a)  x  
(b)  o
  3. SEC USE ONLY
  4. CITIZENSHIP OR PLACE OF ORGANIZATION  
U.S. Citizen
- |                                                                                        |    |                                              |
|----------------------------------------------------------------------------------------|----|----------------------------------------------|
| NUMBER OF<br>SHARES<br>BENEFICIALLY<br>OWNED BY<br>EACH<br>REPORTING<br>PERSON<br>WITH | 5. | SOLE VOTING POWER<br>0                       |
|                                                                                        | 6. | SHARED VOTING POWER<br><br>41 shares         |
|                                                                                        | 7. | SOLE DISPOSITIVE POWER<br>0                  |
|                                                                                        | 8. | SHARED DISPOSITIVE POWER<br>See Row 6 above. |
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
See Row 6 above.
  10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES  
CERTAIN SHARES  o
  11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
  
Approximately 0.0%(4) as of December 31, 2008
  12. TYPE OF REPORTING PERSON  
IN; HC



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1. NAME OF REPORTING PERSON  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
  
Citadel Holdings I LP
  2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP  
(a)  x  
(b)  o
  3. SEC USE ONLY
  4. CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware limited partnership
- |                                                                                        |    |                                              |
|----------------------------------------------------------------------------------------|----|----------------------------------------------|
| NUMBER OF<br>SHARES<br>BENEFICIALLY<br>OWNED BY<br>EACH<br>REPORTING<br>PERSON<br>WITH | 5. | SOLE VOTING POWER<br>0                       |
|                                                                                        | 6. | SHARED VOTING POWER<br><br>41 shares         |
|                                                                                        | 7. | SOLE DISPOSITIVE POWER<br>0                  |
|                                                                                        | 8. | SHARED DISPOSITIVE POWER<br>See Row 6 above. |
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
See Row 6 above.
  10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES  
CERTAIN SHARES  o
  11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
  
Approximately 0.0%(5) as of December 31, 2008
  12. TYPE OF REPORTING PERSON  
PN; HC



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1. NAME OF REPORTING PERSON  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
  
Citadel Derivatives Group LLC
  2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP  
(a)  x  
(b)  o
  3. SEC USE ONLY
  4. CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware limited liability company
- |                                                                                        |    |                                              |
|----------------------------------------------------------------------------------------|----|----------------------------------------------|
| NUMBER OF<br>SHARES<br>BENEFICIALLY<br>OWNED BY<br>EACH<br>REPORTING<br>PERSON<br>WITH | 5. | SOLE VOTING POWER<br>0                       |
|                                                                                        | 6. | SHARED VOTING POWER<br><br>41 shares         |
|                                                                                        | 7. | SOLE DISPOSITIVE POWER<br>0                  |
|                                                                                        | 8. | SHARED DISPOSITIVE POWER<br>See Row 6 above. |
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
See Row 6 above.
  10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES  
CERTAIN SHARES  o
  11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
  
Approximately 0.0%(6) as of December 31, 2008
  12. TYPE OF REPORTING PERSON  
OO; BD



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Item 1(a)

Name of Issuer: W.R. GRACE & CO.

1(b)

Address of Issuer's Principal Executive Offices:

7500 Grace Drive  
Columbia, MD 21044

Item 2(a)

Name of Person Filing(Z)

Item 2(b)

Address of Principal Business Office

Item 2(c)

Citizenship

Citadel Investment Group, L.L.C.  
131 S. Dearborn Street  
32nd Floor  
Chicago, Illinois 60603  
Delaware limited liability company

Citadel Investment Group II, L.L.C.  
131 S. Dearborn Street  
32nd Floor  
Chicago, Illinois 60603  
Delaware limited liability company

Citadel Limited Partnership  
131 S. Dearborn Street  
32nd Floor  
Chicago, Illinois 60603  
Delaware limited partnership

Kenneth Griffin  
131 S. Dearborn Street  
32nd Floor  
Chicago, Illinois 60603  
U.S. Citizen

Citadel Holdings I LP  
c/o Citadel Investment Group II, L.L.C.  
131 S. Dearborn Street  
32nd Floor  
Chicago, Illinois 60603  
Delaware limited partnership

Citadel Derivatives Group LLC  
c/o Citadel Investment Group II, L.L.C.  
131 S. Dearborn Street

32nd Floor  
Chicago, Illinois 60603  
Delaware limited liability company

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7Citadel Derivatives Group LLC (“CDG”) is majority owned by Citadel Derivatives Group Investors, LLC, a Delaware limited liability company (“CDGI”). CDGI does not have control over the voting or disposition of securities held by CDG.

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2(d)

Title of Class of Securities:

Common Stock, par value \$0.01.

2(e)

CUSIP Number:

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Item 3 If this statement is filed pursuant to Rules 13d-1(b), or 13d-2(b) or (c), check whether the person filing is a:

- (a)  Broker or dealer registered under Section 15 of the Exchange Act;
- (b)  Bank as defined in Section 3(a)(6) of the Exchange Act;
- (c)  Insurance company as defined in Section 3(a)(19) of the Exchange Act;
- (d)  Investment company registered under Section 8 of the Investment Company Act;
- (e)  An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);
- (f)  An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
- (g)  A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
- (h)  A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act;
- (i)  A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act;
- (j)  Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

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

Item 4

Ownership:

CITADEL INVESTMENT GROUP, L.L.C.  
CITADEL INVESTMENT GROUP II, L.L.C.  
CITADEL LIMITED PARTNERSHIP  
KENNETH GRIFFIN  
CITADEL HOLDINGS I LP  
CITADEL DERIVATIVES GROUP LLC

(a) Amount beneficially owned:

41 shares

(b) Percent of Class:

Approximately 0.0%~~(8)~~ as of December 31, 2008

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8

See footnote 1 above.

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(c) Number of shares as to which such person has:

(i) sole power to vote or to direct the vote:

0

(ii) shared power to vote or to direct the vote:

See Item 4(a) above.

(iii) sole power to dispose or to direct the disposition of:

0

(iv) shared power to dispose or to direct the disposition of:

See Item 4(a) above.

Item 5 Ownership of Five Percent or Less of a Class:

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following:

Item 6 Ownership of More than Five 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:

See Item 2 above.

Item 8 Identification and Classification of Members of the Group:

Not Applicable.

Item 9 Notice of Dissolution of Group:

Not Applicable.



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Item 10

Certification:

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.

\* John C. Nagel is signing on behalf of Kenneth Griffin as attorney-in-fact pursuant to a power of attorney previously filed with the Securities and Exchange Commission on February 24, 2006, and hereby incorporated by reference herein. The power of attorney was filed as an attachment to a filing by Citadel Limited Partnership on Schedule 13G for Morgans Hotel Group Co.

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

Dated this 13th day of February, 2009.

KENNETH GRIFFIN

CITADEL LIMITED PARTNERSHIP

By : / s / J o h n C .  
Nagel

.By: Citadel Investment Group, L.L.C.,  
its General Partner

John C. Nagel, attorney-in-fact\*

CITADEL DERIVATIVES GROUP LLC

By : / s / J o h n C .  
Nagel

John C. Nagel, Authorized Signatory

By: Citadel Holdings I LP,  
its Manager

By: Citadel Investment Group II, L.L.C.,  
its General Partner

By : / s / J o h n C .  
Nagel

John C. Nagel, Authorized Signatory

CITADEL INVESTMENT GROUP, L.L.C.

By : / s / J o h n C .  
Nagel

John C. Nagel, Authorized Signatory

CITADEL INVESTMENT GROUP II, L.L.C.

By : / s / J o h n C .  
Nagel

John C. Nagel, Authorized Signatory

CITADEL HOLDINGS I LP

By: Citadel Investment Group II, L.L.C.,  
its General Partner

By : / s / J o h n C .  
Nagel

John C. Nagel, Authorized Signatory