W R GRACE & CO Form SC 13G February 14, 2006

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

SCHEDULE 13G Under the Securities Exchange Act of 1934 (Amendment No. ____) * W.R. Grace & Co. ______ (Name of Issuer) Common Stock, \$0.01 Par Value (Title of Class of Securities) 38388F108 _____ (CUSIP Number) January 31, 2006 (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)

* 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 the disclosures provided in a prior cover page.

[] Rule 13d-1(d)

The information required in 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).

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

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CUSI	IP No.	38388F108				
1.	Names of Reporting I.R.S. Identifica		Max Holmes of above persons (entities on	ly).		
2.	Check the Appropriate Box if a Member of a Group (See Instructions)					
	(a) [] (b) [X]					
3.	SEC Use Only					
4.	Citizenship or Pi	Lace of Orga	nization			
	United States					
Number of Shares Bene- ficially owned by Each Reporting Person With:		5.	Sole Voting Power	3,854,300		
		6.	Shared Voting Power	0		
		7.	Sole Dispositive Power	3,854,300		
		8.	Shared Dispositive Power	0		
9.	Aggregate Amount	Beneficiall	y Owned by Each Reporting Pe	rson		
	3,854,300					
10.	Check if the Aggi		nt in Row (11) Excludes Certa	in Shares		
 11.	Porcent of Class	Poprosontos	l by Amount in Row (9)			
11.	5.5%	Kepresenced	by Amount in Now (3)			
12.	Type of Reporting	T Person (Se				
12.	IN	g rerson (se	se instructions,			
		E	Page 2 of 7 pages			
CUSI	IP No.	38388F108				
1.	Names of Reporting Persons. Plainfield Asset Management LLC I.R.S. Identification Nos. of above persons (entities only). 20-2332356					
2.	Check the Appropriate Box if a Member of a Group (See Instructions)					
	(a) [] (b) [X]					
3.	SEC Use Only	·				
4.	Citizenship or Pi	Lace of Orga	nization			
	Delaware					

	Number of Shares Bene-		Sole Voting Power	3,854,300		
ficially owned by Each Reporting Person With:		6.	Shared Voting Power	0		
			Sole Dispositive Power	3,854,300		
		8.	Shared Dispositive Power	0		
).	Aggregate Amount Be	eneficial	ly Owned by Each Reporting Pe	rson		
	3,854,300					
LO.	Check if the Aggree (See Instructions)	gate Amou	nt in Row (11) Excludes Certa	in Shares		
 L1.	Percent of Class Re	epresente	d by Amount in Row (9)	<u>.</u>		
	5.5%	-				
 12.						
		:	Page 3 of 7 pages			
CUSI	IP No. 383	388F108				
	Names of Reporting	Persons.	Plainfield Special Situat Master Fund Limited of above persons (entities on			
 1.	Names of Reporting	Persons.	Master Fund Limited	ly). 98-045187		
 1.	Names of Reporting	Persons.	Master Fund Limited of above persons (entities on	ly). 98-045187		
1. 2.	Names of Reporting I.R.S. Identification Check the Appropriation (a) []	Persons.	Master Fund Limited of above persons (entities on	ly). 98-045187		
1. 2.	Names of Reporting I.R.S. Identification Check the Appropriation (a) [] (b) [X]	Persons.	Master Fund Limited of above persons (entities on f a Member of a Group (See In	ly). 98-045187		
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11. 22. 33.	Names of Reporting I.R.S. Identification Check the Appropriation (a) [] (b) [X] SEC Use Only Citizenship or Place Cayman Islands	Persons.	Master Fund Limited of above persons (entities on f a Member of a Group (See In anization Sole Voting Power	ly). 98-045187: structions)		
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 22. 33. 4. Numk Shar fici	Names of Reporting I.R.S. Identification Check the Appropriation (a) [] (b) [X] SEC Use Only Citizenship or Place Cayman Islands Der of the Bene- tally owned Each orting	Persons. ion Nos. ate Box i ce of Org.	Master Fund Limited of above persons (entities on f a Member of a Group (See In anization Sole Voting Power Shared Voting Power	ly). 98-045187: structions)		
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11. Percent of Class Represented by Amount in Row (9)

5.5%

12. Type of Reporting Person (See Instructions)

CO

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Item 1.

- (a) The name of the issuer is W.R Grace & Co. (the "Issuer").
- (b) The principal executive office of the Issuer is located at 7500 Grace Drive, Columbia, Maryland 21044

Item 2.

- (a) The names of the persons filing this statement (the "Statement") are Max Holmes, Plainfield Asset Management LLC, a Delaware limited liability company ("Asset Management"), Plainfield Special Situation Master Fund Limited, a Cayman Islands corporation ("Master Fund") (collectively, the "Filers").
- (b) The Principal Business Office of the Filers is 55 Railroad Avenue, Third Floor, Greenwich, CT 06830.
- (c) For citizenship information see item 4 of the cover sheet of each Filer.
- (d) This Statement relates to the Common Stock, 0.01 par value, of the Issuer, including options to purchase the Common Stock.
- (e) The CUSIP Number of the Common Stock of the Issuer is 38388F108.
- Item 3. If this statement is filed pursuant to ss.ss.240.13d-1(b), or 240.13d-2(b) or (c), check whether the person filing is a:
- (a) [] Broker or dealer registered under section 15 of the Act (15 U.S.C. 780).
- (b) [] Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c) [] Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
- (d) [] Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
- (e) [] An investment adviser in accordance with ss.240.13d-1(b)(1)(ii)(E);
- (f) [] An employee benefit plan or endowment fund in accordance with ss.240.13d-1(b)(1)(ii)(F);
- (g) [] A parent holding company or control person in accordance with ss.240.13d-1 (b) (1) (ii) (G);
- (i) [] A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) [] Group, in accordance with ss.240.13d-1(b)(1)(ii)(J);

Item 4. Ownership.

See Items 5-9 and 11 on the cover page for each filer. The ownership listed on the cover page includes ownership as of February 10, 2006 of 1,000,000 shares of Common Stock and options to acquire 2,854,300 shares of common stock. The percentage ownership listed on the cover page has been calculated in accordance with ss. 240.13d-3 (d) (1) and is based upon 66,921,696 shares of the Issuer's

Common Stock outstanding on October 31, 2005, as reported in the Issuer's Quarterly Report on Form 10-Q for the quarter ended September 30, 2005.

Max Holmes is the chief investment officer of Asset Management. Asset Management is the Manager of Master Fund. Master Fund is a private investment vehicle formed for the purpose of investing and trading in a wide variety of securities and financial instruments. The Common Stock was purchased by Master Fund.

Instruction. For computations regarding securities which represent a right to acquire an underlying security see ss.240.13d-3(d)(1).

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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.

Instruction: Dissolution of a group requires a response to this item.

Item 6. Ownership of More than Five Percent on Behalf of Another Person. If any other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities, a statement to that effect should be included in response to this item and, if such interest relates to more than five percent of the class, such person should be identified. A listing of the shareholders of an investment company registered under the Investment Company Act of 1940 or the beneficiaries of employee benefit plan, pension fund or endowment fund is not required.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company.

If a parent holding company or control person has filed this schedule, pursuant to Rule 13d-1(b) (ii) (G), so indicate under Item 3(g) and attach an exhibit stating the identity and the Item 3 classification of the relevant subsidiary. If a parent holding company or control person has filed this schedule pursuant to Rule 13d-1(c) or Rule 13d-1(d), attach an exhibit stating the identification of the relevant subsidiary.

EXHIBIT ATTACHED []

Item 8. Identification and Classification of Members of the Group

If a group has filed this schedule pursuant to Rule 13d-1(b)(1)(ii)(J), so indicate under Item 3(j) and attach an exhibit stating the identity and Item 3 classification of each member of the group. If a group has filed this schedule pursuant to Rule 13d-1(c) or Rule 13d-1(d), attach an exhibit stating the identity of each member of the group.

Item 9. Notice of Dissolution of Group

Notice of dissolution of a group may be furnished as an exhibit stating the date of the dissolution and that all further filings with respect to transactions in the security reported on will be filed, if required, by members of the group, in their individual capacity. See Item 5.

EXHIBIT ATTACHED []

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.

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SIGNATURE

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.

Dated: February 14, 2006

/s/ MAX HOLMES

MAX HOLMES

PLAINFIELD ASSET MANAGEMENT LLC

By: /s/ THOMAS X. FRITSCH

Thomas X. Fritsch Senior Vice President and General Counsel

PLAINFIELD SPECIAL SITUATION MASTER FUND LIMITED

By: Plainfield Asset Management LLC

By: /s/ THOMAS X. FRITSCH

Thomas X. Fritsch Senior Vice President and General Counsel

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.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See ss.240.13d-7 for other parties for whom copies are to be sent.

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001)

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EXHIBIT A

JOINT FILING AGREEMENT PURSUANT TO RULE 13D-1(K)(1)

This agreement is made pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended (the "Act") by and among the parties listed below, each referred to herein as a "Joint Filer." The Joint Filers agree that a statement of beneficial ownership as required by Section 13(d) of the Act and the Rules thereunder may be filed on each of their behalf on Schedule 13D or Schedule 13G, as appropriate, and that said joint filing may thereafter be amended by further joint filings. The Joint Filers state that they each satisfy the requirements for making a joint filing under Rule 13d-1.

Dated: February 14, 2006

/s/ MAX HOLMES

MAX HOLMES

PLAINFIELD SPECIAL SITUATION MASTER FUND LIMITED, a Cayman Islands corporation

By: PLAINFIELD ASSET MANAGEMENT LLC Its Manager

By: /s/ THOMAS X. FRITSCH

Thomas X. Fritsch Senior Vice President and General Counsel

PLAINFIELD ASSET MANAGEMENT LLC

By: /s/ THOMAS X. FRITSCH

Thomas X. Fritsch Senior Vice President and General Counsel