

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM S-8

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

W. R. GRACE & CO.

(Exact name of registrant as specified in its charter)

DELAWARE
(State or other jurisdiction of
incorporation or organization)

65-0654331
(I.R.S. Employer
Identification No.)

ONE TOWN CENTER ROAD
BOCA RATON, FLORIDA 33486-1010
(Address of principal executive offices, including zip code)

W. R. GRACE & CO. 1981 STOCK INCENTIVE PLAN
(Full title of the Plan)

ROBERT B. LAMM
W. R. GRACE & CO.
ONE TOWN CENTER ROAD
BOCA RATON, FLORIDA 33486-1010
561/362-1645
(Name, address, including zip code, and 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
COMMON STOCK, PAR VALUE \$0.01 PER SHARE	4,347 SHARES	\$52.25	\$227,131	\$100

* Estimated for the sole purpose of computing the registration fee.
Pursuant to Rule 457(c), the stated price represents the average of
the high and low prices of the registrant's Common Stock in composite
trading on October 1, 1996.

PART I

INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

Pursuant to the Securities Act of 1933 ("Securities Act") and the regulations thereunder, the document or documents containing the information specified in Part I of Form S-8 are not required to be filed with the Securities and Exchange Commission ("SEC") as part of this Form S-8 Registration Statement and, therefore, are not set forth herein.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE.

The following documents filed with the SEC by W. R. Grace & Co. ("Company") are hereby incorporated herein by reference:

1. The Company's Annual Report on Form 10-K for the latest fiscal year for which such a report has been filed, or if no such report has been filed by the Company, the Company's Prospectus, dated August 2, 1996, included in a Registration Statement on Form S-1 (Registration No. 333-9495).
2. All other reports filed by the Company with the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 ("Exchange Act") since the end of the latest fiscal year for which an Annual Report on Form 10-K has been filed, or if no such report has been filed by the Company, since the date of filing of the Prospectus referred to above.
3. The description of the Company's Common Stock included under the caption "Description of New Grace Capital Stock" in the Prospectus referred to above.

All documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this Registration Statement and prior to such time as the Company files a post-effective amendment to this Registration Statement which indicates that all securities offered hereby have been sold, or which deregisters all such securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents.

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ITEM 4. DESCRIPTION OF SECURITIES.

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL.

EXPERTS. The audited financial statements incorporated in this Registration Statement by reference have been so incorporated in reliance upon the reports of Price Waterhouse LLP, independent certified public

accountants, given on the authority of such firm as experts in auditing and accounting.

COUNSEL. The validity of the Common Stock offered hereby will be passed upon by Robert H. Beber, Esq. Mr. Beber is an Executive Vice President and General Counsel of the Company, owns shares of the Company's Common Stock, and holds options to purchase shares of the Company's Common Stock under one or more of the Company's stock incentive plans.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

BY-LAWS; STATE LAW. Under its By-laws, the Company is empowered, to the fullest extent permitted by Delaware law, to indemnify its directors and officers. The By-laws provide that the Company will indemnify its directors and officers against all expense, liability and loss (including attorneys' fees, judgments, fines, excise taxes or penalties, and amounts paid in settlement) resulting from various types of legal actions or proceedings if the actions of the party being indemnified meet the standards of conduct specified under Delaware law. Determinations concerning whether or not the applicable standards have been met can be made by (a) a disinterested majority of the Board of Directors, (b) independent legal counsel or (c) an affirmative vote of a majority of the voting power held by stockholders entitled to vote thereon.

INSURANCE. The directors and officers of the Company are insured against losses arising from any claim against them as such for wrongful acts or omissions, subject to certain limitations.

ITEM 7. EXEMPTIONS FROM REGISTRATION CLAIMED.

Not applicable.

ITEM 8. EXHIBITS.

The following exhibits have been filed with this Registration Statement:

Exhibit No. - - - - -	Exhibit -----
5	Opinion of Robert H. Beber, Esq.
23.1	Consent of Price Waterhouse LLP
23.2	Consent of Robert H. Beber, Esq. (contained in Exhibit 5)
24	Powers of Attorney

ITEM 9. UNDERTAKINGS.

The undersigned Registrant hereby undertakes:

(a) to file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) to reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that paragraphs (a)(i) and (a)(ii) do not apply if the Registration Statement is on Form S-3 or Form S-8, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the Company pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

(b) that, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement

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relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(d) that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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SIGNATURES

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 Boca Raton, State of Florida.

W. R. GRACE & CO.

By P. D. Houchin*

(Senior Vice President)

Date: October 7, 1996

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities indicated on October 7, 1996.

Signature -----	Title -----
A. J. Costello*	Director; Chairman, President and Chief Executive Officer (Principal Executive Officer)
H. A. Eckmann*	V. A. Kamsky* }
M. A. Fox*	J. E. Phipps* } Directors
J. W. Frick*	T. A. Vanderslice* }
T. A. Holmes*	}
P. D. Houchin*	Senior Vice President (Principal Financial Officer)
K. A. Browne*	Vice President and Controller (Principal Accounting Officer)

* By signing his name hereto, Robert B. Lamm is signing this document on behalf of each of the persons indicated above pursuant to powers of attorney duly executed by such persons and filed with the Securities and Exchange Commission.

By /s/ROBERT B. LAMM

Robert B. Lamm
(Attorney-in-Fact)

EXHIBIT INDEX

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Exhibit 5

October 7, 1996

W. R. Grace & Co.
One Town Center Road
Boca Raton, Florida 33486-1010

Ladies and Gentlemen:

You have asked me, as General Counsel of W. R. Grace & Co., a Delaware corporation ("Company"), to render my opinion regarding certain matters in connection with a Registration Statement on Form S-8 ("Registration Statement") to be filed by the Company with the Securities and Exchange Commission under the Securities Act of 1933 covering 4,347 shares ("Shares") of the Common Stock, par value \$0.01 per share, of the Company issuable pursuant to the Company's 1981 Stock Incentive Plan, as amended ("Plan").

I have examined, or caused to be examined, the Certificate of Incorporation and By-laws of the Company, as amended to date, the records of its corporate proceedings, the Plan, the Registration Statement and such other documents as I have deemed necessary in connection with the opinion hereinafter expressed.

Based on the foregoing, I am of the opinion that the Shares, when issued in accordance with the terms of the Plan, will be validly issued and outstanding, fully paid and nonassessable shares of the Company's Common Stock.

I hereby consent to the filing of this opinion as an exhibit to the Registration Statement.

Very truly yours,

/s/ROBERT H. BEBER

Exhibit 23.1

CONSENT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated January 31, 1996 appearing on page F-3 of the Prospectus, dated August 2, 1996, of W. R. Grace & Co. (previously named Grace Holding, Inc.). We also consent to the incorporation by reference of our report on the Financial Statement Schedule, which appears on page F-2 of such Prospectus. We also consent to the reference to us under Item 5 of such Registration Statement.

PRICE WATERHOUSE LLP

/s/PRICE WATERHOUSE LLP

PRICE WATERHOUSE LLP
Ft. Lauderdale, Florida
October 7, 1996

POWER OF ATTORNEY

The undersigned hereby appoints ROBERT H. BEBER, PETER D. HOUCHIN and ROBERT B. LAMM as his/her true and lawful attorneys-in-fact for the purpose of signing all registration statements on Form S-8, and all amendments thereto, to be filed by W. R. GRACE & CO., a Delaware corporation ("Company"), with the Securities and Exchange Commission with respect to the Company's 1996 Stock Incentive Plan and the Company's 1996 Stock Retainer Plan for Nonemployee Directors, as well as the following plans of W. R. Grace & Co., a New York corporation, being assumed by the Company: 1981 Stock Incentive Plan, 1986 Stock Incentive Plan, 1989 Stock Incentive Plan, 1994 Stock Incentive Plan, Hourly Employees Savings and Investment Plan and Salaried Employees Savings and Investment Plan. Each of such attorneys-in-fact is appointed with full power to act without the other.

/s/A. J. Costello	/s/T. A. Holmes
/s/H. A. Eckmann	/s/V. A. Kamsky
/s/M. A. Fox	/s/J. E. Phipps
/s/J. W. Frick	/s/T. A. Vanderslice

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The undersigned hereby appoints ROBERT H. BEBER and ROBERT B. LAMM as his true and lawful attorneys-in-fact for the purpose of signing all registration statements on Form S-8, and all amendments thereto, to be filed by W. R. GRACE & CO., a Delaware corporation ("Company"), with the Securities and Exchange Commission with respect to the Company's 1996 Stock Incentive Plan and the Company's 1996 Stock Retainer Plan for Nonemployee Directors, as well as the following plans of W. R. Grace & Co., a New York corporation, being assumed by the Company: 1981 Stock Incentive Plan, 1986 Stock Incentive Plan, 1989 Stock Incentive Plan, 1994 Stock Incentive Plan, Hourly Employees Savings and Investment Plan and Salaried Employees Savings and Investment Plan. Each of such attorneys-in-fact is appointed with full power to act without the other.

/s/ Peter D. Houchin
/s/ K. A. Browne