Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION Washington, D. C. 20549

FORM S-8

REGISTRATION STATEMENT Under THE SECURITIES ACT OF 1933

SurModics, Inc.

(Exact name of Registrant as specified in its charter)

Minnesota

(State or other jurisdiction of incorporation or organization)

9924 West 74th Street Eden Prairie, Minnesota

(Address of principal executive offices)

SURMODICS, INC. 2009 EQUITY INCENTIVE PLAN (Full title of the plan)

Bryan K. Phillips Vice President, General Counsel and Secretary 9924 West 74th Street Eden Prairie, Minnesota 55344

(Name and address of agent for service)

(952) 829-2700

(Telephone number, including area code, of agent for service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o

Accelerated filer ☑

Non-accelerated filer o (Do not check if a smaller reporting company) Smaller Reporting Company o

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered (1)(2)	Proposed Maximum Offering Price Per Share (3)	Proposed Maximum Aggregate Offering Price (3)	Amount of Registration Fee
Common Stock, \$0.05 par value	1,500,000	\$19.42	\$29,130,000	\$2,076.97

Pursuant to Rule 416 under the Securities Act of 1933, as amended, this Registration Statement will also cover any additional shares of common stock, (1)par value \$.05 ("Common Stock") of SurModics, Inc. (the "Company") that become issuable under the SurModics, Inc. 2009 Equity Incentive Plan (the "Plan") by reason of any stock dividend, stock split, reorganization or other similar transaction effected without the registrant's receipt of consideration that results in an increase in the number of outstanding shares of the Common Stock.

As described in the Explanatory Note in this Registration Statement, the number of shares of Common Stock registered hereby consists of (a) 1,500,000 (2)shares being registered for the first time, plus (b) an undetermined number of shares (the "Carryover Shares") that were previously registered by the Company under the SurModics, Inc. 2003 Equity Incentive Plan (the "Prior Plan") on Registration Statements Form S-8, filed with the Securities and Exchange Commission on April 2, 2003 (Registration Statement 333-104258) and March 23, 2005 (Registration Statement 333-123521).

Estimated solely for the purpose of determining the registration fee pursuant to the provisions of Rule 457(h) under the Securities Act of 1933 based on (3)the average of the high and low sale prices per share of the Registrant's Common Stock as quoted on the NASDAQ Global Select Market on February 23, 2010.

41-1356149 (I.R.S. Employer Identification No.)

> 55344 (Zip Code)

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EXPLANATORY NOTE

The Company's stockholders approved the Plan on February 8, 2010. The Company's authority to grant new awards under the Prior Plan terminated upon stockholder approval of the Plan. The Plan provides for the issuance of up to 1,500,000 shares of Common Stock not previously covered by a Registration Statement on Form S-8 (the "New Shares") and the issuance of shares of Common Stock in an amount equal to the number of shares represented by any stock option or restricted stock award that is forfeited or terminates without vesting, or any stock option that terminates, expires or lapses without being exercised, under the Prior Plan; provided, however, that shares of Common Stock tendered or withheld to pay the exercise price of a stock option or to pay tax withholding on an award under the Prior Plan will not be added back to the Shares available under the Plan.

The purpose of this Registration Statement is to register the New Shares and to carry forward to this Registration Statement the Carryover Shares. The Carryover Shares were previously registered under the Prior Plan on a Registration Statement on Form S-8, filed with the Securities and Exchange Commission on April 2, 2003 (Registration Statement 333-104258) and March 23, 2005 (Registration Statement 333-123521). The registration fee for the registration of the Carryover Shares was paid in connection with the filing of the foregoing Registration Statements.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The document(s) containing the information required by Part I of Form S-8 will be sent or given to employees as specified by Rule 428(b)(1) under the Securities Act. Such documents need not be filed with the Securities and Exchange Commission (the "Commission"), either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 under the Securities Act. These documents and the documents incorporated by reference in this Registration Statement pursuant to Item 3 of Part II of Form S-8, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, which have been filed by SurModics, Inc. (hereinafter the "Company" or the "Registrant") with the Commission pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act") are incorporated by reference herein and shall be deemed to be a part hereof:

- (a) The Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2009, filed with the Commission on December 11, 2009, as amended;
- (b) All other reports filed by the Registrant pursuant to Section 13(a) and 15(d) of the Exchange Act since the end of the fiscal year referred to in (a) above; and
- (c) the description of the Registrant's common stock in the Registrant's Form 8-A filed with the Commission on February 25, 1998, or in any report, including any amendment, filed under the Exchange Act for the purpose of updating such description.

All other documents filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act subsequent to the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered hereunder have been sold or which deregisters all 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. In this Registration Statement, the Company refers to these documents, and the documents enumerated above, as the "incorporated documents."

Any statement contained in an incorporated document will be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed incorporated document modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

The Company is subject to Minnesota Statutes Chapter 302A, the Minnesota Business Corporation Act (the "Corporation Act"). Section 302A.521 of the Corporation Act provides in substance that, unless prohibited by its articles of incorporation or bylaws, a corporation must indemnify an officer or director who is made or threatened to be made a party to a proceeding by reason of the former or present official capacity of the person against judgments, penalties, fines, including, without limitation, excise taxes assessed against the person with respect to an employee benefit plan, settlements, and reasonable expenses, including attorneys' fees and disbursements, incurred by such person in connection with the proceeding, if certain criteria are met. These criteria, all of which must be met by the person seeking indemnification, are (a) that such person has not been indemnified by another organization or employee benefit plan for the same judgments, penalties, fines, including, without limitation, excise taxes assessed against the person with respect to an employee benefit plan, settlements, and reasonable expenses, including attorneys' fees and disbursements, incurred by the person in connection with the proceeding with respect to the same acts or omissions; (b) that such person must have acted in good faith; (c) that no improper personal benefit was obtained by such person and such person satisfied certain statutory conflicts of interest provisions, if applicable; (d) that in the case of a criminal proceeding, such person had no reasonable cause to believe that the conduct was unlawful; and (e) that, in the case of acts or omissions occurring in such person's performance in an official capacity, such person must have acted in a manner such person reasonably believed was in the best interests of the corporation or, in certain limited circumstances, not opposed to the best interests of the corporation. In addition, Section 302A.521, subd. 3 requires payment by the Company, upon written request, of reasonable expenses in advance of final disposition in certain instances. A decision as to required indemnification is made by a majority of the disinterested board of directors present at a meeting at which a disinterested quorum is present, or by a designated committee of disinterested directors, by special legal counsel, by the disinterested shareholders, or by a court. The Company's articles of incorporation or bylaws impose no limitations on the applicability of Section 302A.521 of the Corporation Act.

The Company also maintains a director and officer insurance policy to cover the Company, its directors and its officers against certain liabilities.

Item 7. Exemption From Registration Claimed.

Not applicable.

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Item 8. Exhibits.

Exhibit No. 4.1	Description Amended and Restated Articles of Incorporation	Method of Filing (1)		
4.2	Amended and Restated Bylaws	(2)		
5	Opinion of Faegre & Benson LLP as to the legality of the shares being registered	Filed Herewith		
10.1	SurModics, Inc. 2009 Equity Incentive Plan	(3)		
10.2	Form of Incentive Stock Option Agreement under the SurModics, Inc. 2009 Equity Incentive Plan	(4)		
10.3	Form of Non-Statutory Stock Option Agreement under the SurModics, Inc. 2009 Equity Incentive Plan	(5)		
10.4	Form of Performance Share Award Agreement under the SurModics, Inc. 2009 Equity Incentive Plan	(6)		
10.5	Form of Restricted Stock Agreement under the SurModics, Inc. 2009 Equity Incentive Plan	(7)		
23.1	Consent of Company Counsel (contained in Exhibit 5 to this Registration Statement)	Filed Herewith		
23.2	Consent of Deloitte & Touche LLP	Filed Herewith		
24	Powers of Attorney (included on page 2 of the Registration Statement)	Filed Herewith		
 Incorporated by reference to Exhibit 3.1 of the Company's Quarterly Report on Form 10-QSB for the quarter ended December 31, 1999, (File No. 0-23837). 				

(2) Incorporated by reference to Exhibit 3.2 of the Company's Quarterly Report on Form 10-Q for the fiscal year ended December 31, 2009, (File No. 0-23837).

(3) Incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A, filed with the Commission on December 18, 2009 (File No. 0-23827).

(4) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K dated February 8, 2010, filed on February 12, 2010, (File No. 0-23837).

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- (5) Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K dated February 8, 2010, filed on February 12, 2010, (File No. 0-23837).
- (6) Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K dated February 8, 2010, filed on February 12, 2010, (File No. 0-23837).
- (7) Incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K dated February 8, 2010, filed on February 12, 2010, (File No. 0-23837).

Item 9. Undertakings.

(a) The undersigned Registrant hereby undertakes:

(1) 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 of 1933;

(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. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective 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)(l)(i) and (a)(l)(ii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement.

(2) 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 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.

(3) 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.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in this 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.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 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 Commission 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.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Company 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 Eden Prairie, State of Minnesota, on February 26, 2010.

SURMODICS, INC.

By /s/ Philip D. Ankeny Philip D. Ankeny Senior Vice President and Chief Financial Officer

POWERS OF ATTORNEY

Each of the undersigned hereby appoints Bruce J Barclay and Philip D. Ankeny, and each of them (with full power to act alone), as attorneys and agents for the undersigned, with full power of substitution, for and in the name, place and stead of the undersigned, to sign and file with the Securities and Exchange Commission under the Securities Act of 1933, as amended, any and all amendments and exhibits to this Registration Statement and any and all applications, instruments and other documents to be filed with the Securities and Exchange Commission pertaining to the registration of the securities covered hereby, with full power and authority to do and perform any and all acts and things whatsoever requisite and necessary or desirable.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons, representing a majority of the Board of Directors, in the capacities indicated on February 26, 2010.

Signature	Title
/s/ Bruce J Barclay	
Bruce J Barclay	President and Chief Executive Officer (Principal Executive Officer) and Director
/s/ Philip D. Ankeny	
Philip D. Ankeny	Senior Vice President and Chief Financial Officer (Principal Financial Officer)
/s/ Mark A. Lehman	
Mark A. Lehman	Corporate Controller (Principal Accounting Officer)
/s/ Robert C. Buhrmaster	
Robert C. Buhrmaster	Chairman
/s/ José H. Bedoya	
José H. Bedoya	Director
/s/ John W. Benson	
John W. Benson	Director
/s/ Mary K. Brainerd	
Mary K. Brainerd	Director
Gerald B. Fischer	Director
Kenneth H. Keller, Ph.D.	Director
Susan E. Knight	Director
John A. Meslow	Director

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Signature	Title
/s/ Gerald B. Fischer	
Gerald B. Fischer	Director
/s/ Kenneth H. Keller, Ph.D.	
Kenneth H. Keller, Ph.D.	Director
/s/ Susan E. Knight	
Susan E. Knight	Director
/s/ John A. Meslow	
John A. Meslow	Director

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February 26, 2010

Board of Directors SurModics, Inc. 9924 West 74th Street Eden Prairie, Minnesota 55344

In connection with the Registration Statement on Form S-8 under the Securities Act of 1933, as amended (the "*Registration Statement*"), relating to the offering of up to 1,500,000 shares of common stock, par value \$0.05 per share ("*Common Stock*"), of SurModics, Inc., a Minnesota corporation (the "*Company*"), pursuant to the SurModics, Inc. 2009 Equity Incentive Plan (the "*Plan*"), and an additional undetermined number of shares of Common Stock represented by any stock option or restricted stock award that is forfeited or terminates without vesting, or any stock option that terminates, expires or lapses without being exercised, under the SurModics, Inc. 2003 Equity Incentive Plan, we have examined such corporate records and other documents, including the Registration Statement, and have reviewed such matters of law as we have deemed relevant hereto, and, based upon such examination and review, it is our opinion that all necessary corporate action on the part of the Company has been taken to authorize the issuance and sale of the shares of Common Stock under the Plan and that, when issued and sold as contemplated by the Plan and the Registration Statement, such shares of Common Stock will be legally issued, fully paid, and nonassessable.

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

Very truly yours,

FAEGRE & BENSON LLP

By: /s/ Gordon S. Weber

Gordon S. Weber

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated December 11, 2009, relating to the consolidated financial statements and financial statement schedule of SurModics, Inc. (which report expresses an unqualified opinion and includes an explanatory paragraph relating to SurModics, Inc.'s adoption of new accounting guidance on the accounting for uncertainty in income taxes), appearing in the Annual Report on Form 10-K/A of SurModics, Inc. for the year ended September 30, 2009, and our report dated December 11, 2009 relating to the effectiveness of SurModics, Inc.'s internal control over financial reporting, appearing in the Annual Report on Form 10-K of SurModics, Inc. for the year ended September 30, 2009.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota February 22, 2010