

CABOT MICROELECTRONICS CORP

Form S-4/A

October 05, 2018

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As filed with the Securities and Exchange Commission on October 5, 2018

Registration No. 333-227301

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

Amendment No. 1

to

FORM S-4

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

CABOT MICROELECTRONICS CORPORATION

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

3674

(Primary Standard Industrial
Classification Code Number)

870 North Commons Drive

Aurora, Illinois 60504

(630) 375-6631

36-4324765

(IRS Employer
Identification Number)

(Address, including Zip Code, and Telephone Number, including
Area Code, of Registrant's Principal Executive Offices)

H. Carol Bernstein

Vice President, Secretary and General Counsel

870 North Commons Drive

Aurora, Illinois 60504

(630) 375-5461

(Name, Address, including Zip Code, and Telephone Number, including Area Code, of Agent for Service)

With a copy to:

Edward D. Herlihy

Roger C. Jackson

William B. Nelson

George A. Casey

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General Counsel and
Secretary
KMG Chemicals, Inc.
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Fort Worth, Texas 76102
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1221 McKinney Street
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Houston, Texas 77010
(713) 547-2000

Heiko Schiwiek
Shearman &
Sterling LLP
599 Lexington Avenue
New York, New York
10022
(212) 848-4000

Approximate date of commencement of proposed sale of the securities to the public:
As soon as practicable after this registration statement is declared effective and upon completion of the merger described in the proxy statement/prospectus contained herein.

If the securities being registered on this form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, please check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the "Securities Act"), check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer)

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer)

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with section 8(a) of the Securities Act or until the registration statement shall become effective on such date as the SEC, acting pursuant to said section 8(a), may determine.

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The information in this proxy statement/prospectus is subject to completion and amendment. A registration statement relating to the securities described in this proxy statement/prospectus has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy these securities be accepted prior to the time the registration statement becomes effective. This proxy statement/prospectus shall not constitute an offer to sell or the solicitation of any offer to buy nor shall there be any sale of these securities in any jurisdiction, in which such offer, solicitation or sale would be unlawful prior to registration under the securities laws of any such jurisdiction.

PRELIMINARY SUBJECT TO COMPLETION, DATED OCTOBER 5, 2018

MERGER PROPOSED YOUR VOTE IS VERY IMPORTANT

October [], 2018

Dear Shareholder:

We cordially invite you to attend a special meeting of shareholders of KMG Chemicals, Inc., a Texas corporation, to be held on November 13, 2018, at 10:00 a.m. (Central Time), at The Worthington Renaissance Fort Worth Hotel, 200 Main Street, Fort Worth, Texas 76102. As previously announced, on August 14, 2018, KMG entered into a merger agreement providing for the acquisition of KMG by Cabot Microelectronics Corporation, a Delaware corporation. At the special meeting, you will be asked to consider and vote upon a proposal to approve and adopt the merger agreement.

If the merger contemplated by the merger agreement is completed, you will be entitled to receive for each share of KMG common stock, without interest (i) \$55.65 in cash and (ii) 0.2000 shares of Cabot Microelectronics common stock.

Based on the closing price of Cabot Microelectronics common stock on August 14, 2018, the last full trading day before the public announcement of the merger, the per share value of KMG common stock implied by the per share merger consideration is \$79.93. Based on the closing price of Cabot Microelectronics common stock on October 4, 2018, the most recent practicable date prior to the date of this proxy statement/prospectus, the per share value of KMG common stock implied by the per share merger consideration is \$76.06. The implied value of the per share merger consideration will fluctuate as the market price of Cabot Microelectronics common stock fluctuates because a portion of the per share merger consideration is payable in a fixed number of shares of Cabot Microelectronics common stock. As a result, the value of the per share merger consideration that KMG shareholders will receive upon completion of the merger could be greater than, less than or the same as the value of the merger consideration on the date of this proxy statement/prospectus or at the time of the KMG special meeting. **Accordingly, you should obtain current stock price quotations for Cabot Microelectronics common stock and KMG common stock before deciding how to vote with respect to approval of the merger proposal.** Cabot Microelectronics common stock trades on The Nasdaq Global Select Market under the symbol "CCMP," and KMG common stock trades on the New York Stock Exchange under the symbol "KMG."

The merger cannot be completed unless KMG shareholders holding at least a majority of the shares of KMG common stock outstanding as of the close of business on October 4, 2018, the record date for the special meeting, vote in favor of the proposal to approve and adopt the merger agreement at the special meeting. Christopher T. Fraser, the Chairman of the Board, President and Chief Executive Officer of KMG, and Fred C. Leonard III, a member of KMG's board of directors, have entered into separate voting agreements with Cabot Microelectronics, pursuant to which Mr. Fraser and Mr. Leonard have agreed to, among other matters, vote the shares of KMG common stock held by each of them, representing approximately 4.9% of the shares of KMG common stock outstanding as of the close of business on the record date and entitled to vote at the special meeting, in favor of the merger.

Your vote is very important, regardless of the number of shares you own. The merger cannot be completed unless the proposal to approve and adopt the merger agreement is approved by the affirmative vote of the holders of at least a majority of the shares of KMG common stock outstanding on the record date. A failure to vote or an abstention will have the same effect as a vote "AGAINST" the proposal to approve and adopt the merger agreement.

Even if you plan to attend the special meeting in person, KMG requests that you complete, sign, date and return, as promptly as possible, the enclosed proxy card in the accompanying prepaid reply envelope or submit your proxy by telephone or over the Internet prior to the special meeting to ensure that your shares of KMG common stock will be represented at the special meeting if you are unable to attend. If you hold your shares in "street name" through a bank,

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brokerage firm or other nominee, you should follow the procedures provided by your bank, brokerage firm or other nominee to vote your shares.

YOUR PROXY IS BEING SOLICITED BY THE BOARD OF DIRECTORS OF KMG. AFTER CAREFUL CONSIDERATION, OUR BOARD OF DIRECTORS HAS UNANIMOUSLY DETERMINED THAT THE TERMS OF THE MERGER AGREEMENT AND THE TRANSACTIONS CONTEMPLATED THEREBY, INCLUDING THE MERGER, ARE IN THE BEST INTERESTS OF KMG AND ITS SHAREHOLDERS AND RECOMMENDED THAT KMG SHAREHOLDERS APPROVE AND ADOPT THE MERGER AGREEMENT AND THE TRANSACTIONS CONTEMPLATED THEREBY, INCLUDING THE MERGER. OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE "FOR" THE PROPOSAL TO APPROVE AND ADOPT THE MERGER AGREEMENT AND "FOR" THE OTHER PROPOSALS DESCRIBED IN THE ACCOMPANYING PROXY STATEMENT/PROSPECTUS. THE BOARD OF DIRECTORS MADE ITS DETERMINATION AFTER CONSULTATION WITH ITS LEGAL AND FINANCIAL ADVISORS AND AFTER CONSIDERING A NUMBER OF FACTORS. IN CONSIDERING THE RECOMMENDATION OF THE BOARD OF DIRECTORS OF KMG, YOU SHOULD BE AWARE THAT CERTAIN DIRECTORS AND EXECUTIVE OFFICERS OF KMG MAY HAVE INTERESTS IN THE MERGER THAT MAY BE DIFFERENT FROM, OR IN ADDITION TO, THE INTERESTS OF KMG SHAREHOLDERS GENERALLY. SEE THE SECTION ENTITLED "THE MERGER INTERESTS OF KMG'S DIRECTORS AND EXECUTIVE OFFICERS IN THE MERGER" BEGINNING ON PAGE 69 OF THE ACCOMPANYING PROXY STATEMENT/PROSPECTUS.

In particular, we urge you to read carefully the section entitled "Risk Factors" beginning on page 22 of the attached proxy statement/prospectus. If you have any questions regarding the accompanying proxy statement/prospectus, you may contact Okapi Partners LLC, KMG's proxy solicitor, by calling toll-free at (855) 305-0856. Banks, brokerage firms and other nominees may call collect at (212) 297-0720.

We urge you to read the accompanying proxy statement/prospectus, including the Annexes and the documents incorporated by reference, carefully and in their entirety.

On behalf of the board of directors of KMG, thank you for your consideration and continued support.

Sincerely,
Christopher T. Fraser

Chairman of the Board, President and Chief Executive Officer

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED THE MERGER OR OTHER TRANSACTIONS DESCRIBED IN THE ACCOMPANYING PROXY STATEMENT/PROSPECTUS OR THE SECURITIES TO BE ISSUED PURSUANT TO THE MERGER UNDER THE ACCOMPANYING PROXY STATEMENT/ PROSPECTUS NOR HAVE THEY DETERMINED IF THE ACCOMPANYING PROXY STATEMENT/ PROSPECTUS IS ACCURATE OR ADEQUATE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The accompanying proxy statement/prospectus is dated October [], 2018 and is first being mailed to KMG shareholders on or about October [], 2018.

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KMG CHEMICALS, INC.

**300 Throckmorton Street
Fort Worth, Texas 76102**

NOTICE OF SPECIAL MEETING OF SHAREHOLDERS

October [], 2018

Dear Shareholder:

You are cordially invited to attend a special meeting of KMG shareholders. The special meeting will be held on November 13, 2018, at 10:00 a.m. (Central Time), at The Worthington Renaissance Fort Worth Hotel, 200 Main Street, Fort Worth, Texas 76102, to consider and vote upon the following matters:

1. a proposal to approve and adopt the Agreement and Plan of Merger, dated as of August 14, 2018, as it may be amended from time to time, by and among KMG Chemicals, Inc., a Texas corporation, Cabot Microelectronics Corporation, a Delaware corporation, and Cobalt Merger Sub Corporation, a Texas corporation and a wholly owned subsidiary of Cabot Microelectronics. A copy of the merger agreement is attached as **Annex A** to the accompanying proxy statement/prospectus;
2. the adjournment of the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes to approve the proposal to approve and adopt the merger agreement at the time of the special meeting or any adjournment or postponement thereof; and
3. a proposal to approve, by non-binding, advisory vote, certain compensation arrangements for KMG's named executive officers in connection with the merger contemplated by the merger agreement.

The record date for the special meeting is October 4, 2018. Only shareholders of record as of the close of business on October 4, 2018 are entitled to notice of, and to vote at, the special meeting. All shareholders of record as of that date are cordially invited to attend the special meeting in person.

Your vote is very important, regardless of the number of shares of KMG common stock that you own. The merger cannot be completed unless the proposal to approve and adopt the merger agreement is approved by the affirmative vote of the holders of at least a majority of the shares of KMG common stock outstanding on the record date. Even if you plan to attend the special meeting in person, KMG requests that you complete, sign, date and return, as promptly as possible, the enclosed proxy card in the accompanying prepaid reply envelope or submit your proxy by telephone or the Internet prior to the special meeting to ensure that your shares of KMG common stock will be represented at the special meeting if you are unable to attend. If you hold your shares in "street name" through a bank, brokerage firm or other nominee, you should follow the procedures provided by your bank, brokerage firm or other nominee to vote your shares. If you fail to submit a proxy or to attend the special meeting in person or do not provide your bank, brokerage firm or other nominee with instructions as to how to vote your shares, as applicable, your shares of KMG common stock will not be counted for purposes of determining whether a quorum is present at the special meeting and will have the same effect as a vote "AGAINST" the proposal to approve and adopt the merger agreement.

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Your proxy is being solicited by the board of directors of KMG. After careful consideration, our board of directors has unanimously determined that the terms of the merger agreement and the transactions contemplated thereby, including the merger, are in the best interests of KMG and its shareholders. **OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE "FOR" THE PROPOSAL TO APPROVE AND ADOPT THE MERGER AGREEMENT AND "FOR" THE OTHER PROPOSALS DESCRIBED IN THE ACCOMPANYING PROXY STATEMENT/PROSPECTUS. THE BOARD OF DIRECTORS MADE ITS DETERMINATION AFTER CONSULTATION WITH ITS LEGAL AND FINANCIAL ADVISORS AND AFTER CONSIDERING A NUMBER OF FACTORS. IN CONSIDERING THE RECOMMENDATION OF THE BOARD OF DIRECTORS OF KMG, YOU SHOULD BE AWARE THAT CERTAIN DIRECTORS AND EXECUTIVE OFFICERS OF KMG MAY HAVE INTERESTS IN THE MERGER THAT MAY BE DIFFERENT FROM, OR IN ADDITION TO, THE INTERESTS OF KMG SHAREHOLDERS GENERALLY. SEE THE SECTION ENTITLED "THE MERGER INTERESTS OF KMG'S DIRECTORS AND EXECUTIVE OFFICERS IN THE MERGER" BEGINNING ON PAGE 69 OF THE ACCOMPANYING PROXY STATEMENT/PROSPECTUS.**

Only KMG shareholders of record as of the close of business on the record date, their duly authorized proxy holders, beneficial owners with proof of ownership and KMG's guests may attend the special meeting. To gain admittance, please bring valid photo identification, such as a driver's license or passport. If your shares of KMG common stock are held through a bank, brokerage firm or other nominee, please bring proof of your beneficial ownership of such shares to the special meeting. Acceptable proof could include an account statement showing that you owned shares of KMG common stock on the record date. If you are the representative of a corporate or institutional shareholder, you must present valid photo identification along with proof that you are the representative of such shareholder. Please note that cameras, recording devices and other electronic devices will not be permitted at the special meeting.

KMG shareholders who do not vote in favor of the proposal to approve and adopt the merger agreement, and who object in writing to the merger prior to the special meeting and comply with all the requirements of the laws of the State of Texas, which are summarized in the accompanying proxy statement/prospectus and reproduced in their entirety in **Annex D** to the accompanying proxy statement/prospectus, will be entitled to dissenters' rights of appraisal to obtain the fair value of their shares of KMG common stock.

WHETHER OR NOT YOU PLAN TO ATTEND THE SPECIAL MEETING, PLEASE COMPLETE, DATE, SIGN AND RETURN, AS PROMPTLY AS POSSIBLE, THE ENCLOSED PROXY CARD IN THE ACCOMPANYING PREPAID REPLY ENVELOPE, OR SUBMIT YOUR PROXY BY TELEPHONE OR THE INTERNET. IF YOU ATTEND THE SPECIAL MEETING AND VOTE IN PERSON, YOUR VOTE BY BALLOT WILL REVOKE ANY PROXY PREVIOUSLY SUBMITTED.

If you have any questions about the special meeting, the merger, the other proposals or the accompanying proxy statement/prospectus, would like additional copies of the proxy statement/prospectus, need to obtain proxy cards or other information related to this proxy solicitation or need help submitting a proxy or voting your shares of KMG common stock, please contact KMG's proxy solicitor:

**Banks and Brokerage Firms, Please Call: (212) 297-0720
Shareholders and All Others Call Toll-Free: (855) 305-0856**

By order of the Board of Directors

Christopher T. Fraser
*Chairman of the Board, President and
Chief Executive Officer*
October [], 2018

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ADDITIONAL INFORMATION

This proxy statement/prospectus incorporates important business and financial information about Cabot Microelectronics Corporation ("Cabot Microelectronics") and KMG Chemicals, Inc. ("KMG") from other documents that Cabot Microelectronics and KMG have filed with the U.S. Securities and Exchange Commission (the "SEC") and that are contained in or incorporated by reference into this proxy statement/prospectus. For a listing of documents incorporated by reference into this proxy statement/prospectus, please see the section titled "Where You Can Find More Information" beginning on page 146. This information is available for you to review at the SEC's public reference room located at 100 F Street, N.E., Room 1580, Washington, D.C. 20549, and through the SEC's website at www.sec.gov.

You can obtain copies of this proxy statement/prospectus and the documents incorporated by reference into this proxy statement/prospectus free of charge by requesting them in writing or by telephone at the following addresses and telephone numbers:

**For Information Regarding Cabot
Microelectronics:
Cabot Microelectronics Corporation
870 North Commons Drive
Aurora, Illinois 60504
(630) 499-2600
Attention: Investor Relations**

**For Information Regarding
KMG:
KMG Chemicals, Inc.
300 Throckmorton Street
Fort Worth, Texas 76102
(817) 761-6006
Attention: Investor Relations**

In addition, if you have questions about the special meeting, the merger, the proposals or this proxy statement/prospectus, would like additional copies of the proxy statement/prospectus, need to obtain proxy cards or other information related to the proxy solicitation or need help submitting a proxy or voting your shares of KMG common stock, you may contact Okapi Partners LLC, KMG's proxy solicitor, at the address and telephone number listed below. You will not be charged for any of these documents that you request.

**Okapi Partners LLC
1212 Avenue of the Americas, 24th Floor
New York, New York 10036**

**Banks and Brokerage Firms, Please Call: (212) 297-0720
Shareholders and All Others Call Toll-Free: (855) 305-0856**

Email: info@okapipartners.com

If you would like to request any documents, please do so by November 5, 2018, which is the date that is five business days prior to the date of the special meeting, in order to receive them before the special meeting.

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ABOUT THIS PROXY STATEMENT/PROSPECTUS

This proxy statement/prospectus, which forms part of a registration statement on Form S-4 (Registration No. 333-227301) filed with the SEC by Cabot Microelectronics, constitutes a prospectus of Cabot Microelectronics under the Securities Act of 1933, as amended (referred to in this proxy statement/prospectus as the Securities Act), with respect to the Cabot Microelectronics common stock to be issued to KMG shareholders pursuant to the merger. This proxy statement/prospectus also constitutes a proxy statement for KMG under the Securities Exchange Act of 1934, as amended (referred to in this proxy statement/prospectus as the Exchange Act), and a notice of meeting with respect to the special meeting of KMG shareholders.

You should rely only on the information contained in or incorporated by reference into this proxy statement/prospectus. No one has been authorized to provide you with information that is different from that contained in, or incorporated by reference into, this proxy statement/prospectus. This proxy statement/prospectus is dated October [], 2018, and you should assume that the information contained in this proxy statement/prospectus is accurate only as of such date. You should also assume that the information incorporated by reference into this proxy statement/prospectus is accurate only as of the date of such information.

This proxy statement/prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, any securities, or the solicitation of a proxy in any jurisdiction to or from any person to whom it is unlawful to make any such offer or solicitation in such jurisdiction. Information contained in this proxy statement/prospectus regarding Cabot Microelectronics has been provided by Cabot Microelectronics, and information contained in this proxy statement/prospectus regarding KMG has been provided by KMG.

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QUESTIONS AND ANSWERS

The following questions and answers are intended to briefly address some commonly asked questions regarding the merger, the merger agreement and the special meeting. These questions and answers may not address all questions that may be important to you as a KMG shareholder. Please refer to the section titled "Summary" beginning on page 1 and the more detailed information contained elsewhere in this proxy statement/prospectus, the annexes to this proxy statement/prospectus and the documents referred to in this proxy statement/prospectus, which you should read carefully and in their entirety. You may obtain the information incorporated by reference into this proxy statement/prospectus without charge by following the instructions under the section titled "Where You Can Find More Information" beginning on page 146.

Q: Why am I receiving this proxy statement/prospectus?

A: KMG Chemicals, Inc. ("KMG") is sending these materials to KMG shareholders to help them decide how to vote their shares of KMG common stock with respect to the adoption of the Agreement and Plan of Merger, dated August 14, 2018 (as it may be amended from time to time, the "merger agreement"), by and among Cabot Microelectronics Corporation ("Cabot Microelectronics"), KMG and Cobalt Merger Sub Corporation, a wholly owned subsidiary of Cabot Microelectronics ("Merger Sub"), which agreement provides for the acquisition of KMG by Cabot Microelectronics.

This document constitutes both a proxy statement of KMG and a prospectus of Cabot Microelectronics. It is a proxy statement because KMG is soliciting proxies from its shareholders. It is a prospectus because Cabot Microelectronics will issue shares of its common stock in exchange for shares of KMG common stock in the merger if the merger is completed.

Q: When and where is the special meeting of the KMG shareholders?

A: A special meeting of KMG shareholders (the "special meeting") will be held to approve the merger on November 13, 2018, at 10:00 a.m. (Central Time), at The Worthington Renaissance Fort Worth Hotel, 200 Main Street, Fort Worth, Texas 76102.

Q: What is the merger?

A: KMG has agreed to be acquired by Cabot Microelectronics under the terms of the merger agreement, which is further described in this proxy statement/prospectus. If the merger agreement is approved and adopted by KMG shareholders and the other conditions to closing under the merger agreement are satisfied or waived, Merger Sub will merge with and into KMG (the "merger"), with KMG surviving the merger as a wholly owned subsidiary of Cabot Microelectronics. KMG is sometimes referred to in this proxy statement/prospectus as the surviving company.

The merger cannot be completed unless the merger proposal is approved by the affirmative vote of the holders of at least a majority of the shares of KMG common stock outstanding on the record date. Your failing to submit a proxy or vote in person at the special meeting, or your abstaining from voting or your failing to provide your bank, brokerage firm or other nominee with instructions on how to vote your shares, as applicable, will have the same effect as a vote against the merger proposal. The KMG board of directors unanimously recommends that shareholders vote **"FOR"** the merger proposal. This proxy statement/prospectus includes important information about the merger and the merger agreement, a copy of which is attached as **Annex A** to this proxy statement/prospectus. KMG shareholders should read this information carefully and in its entirety.

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Q: Are there any risks that I should consider in deciding whether to vote for the approval of the merger proposal?

A:

Yes. You should read and carefully consider the risk factors set forth in the section titled "Risk Factors" beginning on page 22. You also should read and carefully consider the risk factors of Cabot Microelectronics and KMG contained in the documents that are incorporated by reference into this proxy statement/prospectus.

Q: What will KMG shareholders receive for their shares if the merger is completed?

A:

If the merger is completed, you will be entitled to receive, for each share of KMG common stock that you hold, merger consideration equal to \$55.65 in cash, plus 0.2000 shares of Cabot Microelectronics common stock (the "merger consideration"), in each case, without interest and less any applicable withholding taxes. You will receive cash in lieu of any fractional shares of Cabot Microelectronics common stock that you would otherwise be entitled to receive.

Based on the closing price of Cabot Microelectronics common stock on August 14, 2018, the last full trading day before the public announcement of the merger, the per share value of KMG common stock implied by the per share merger consideration is \$79.93. Based on the closing price of Cabot Microelectronics common stock on October 4, the most recent practicable date prior to the date of this proxy statement/prospectus, the per share value of KMG common stock implied by the per share merger consideration is \$76.06. The implied value of the per share merger consideration will fluctuate as the market price of Cabot Microelectronics common stock fluctuates because a portion of the per share merger consideration is payable in a fixed number of shares of Cabot Microelectronics common stock. As a result, the value of the per share merger consideration that KMG shareholders will receive upon completion of the merger could be greater than, less than or the same as the value of the merger consideration on the date of this proxy statement/prospectus or at the time of the KMG special meeting. Accordingly, you should obtain current stock price quotations for Cabot Microelectronics common stock and KMG common stock before deciding how to vote with respect to approval of the merger proposal. Cabot Microelectronics common stock trades on The Nasdaq Global Select Market (the "Nasdaq") under the symbol "CCMP," and KMG common stock trades on the New York Stock Exchange (the "NYSE") under the symbol "KMG."

For additional information regarding the consideration to be received in the merger, see the section titled "The Merger Per Share Merger Consideration" beginning on page 45.

Q: What happens if I am eligible to receive a fraction of a share of Cabot Microelectronics common stock as part of the per share merger consideration?

A:

If the aggregate number of shares of Cabot Microelectronics common stock that you are entitled to receive as part of the per share merger consideration otherwise would include a fraction of a share of Cabot Microelectronics common stock, you will receive cash in lieu of that fractional share. See the section titled "The Merger Exchange of Shares" beginning on page 77.

Q: What will holders of KMG equity awards receive in the merger?

A:

Immediately prior to the effective time of the merger (the "effective time"), each restricted stock unit award relating to shares of KMG common stock that was granted prior to August 14, 2018 and that is outstanding as of immediately prior to the effective time will fully vest (with any applicable performance metrics deemed satisfied based on the level of achievement specified in the applicable award agreement) and be cancelled and converted in exchange for the right to receive the merger consideration in respect of each share of KMG common stock underlying the applicable restricted stock unit award.

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Immediately prior to the effective time, each restricted unit award relating to shares of KMG common stock that was granted on or following August 14, 2018 and that is outstanding as of immediately prior to the effective time will be assumed by Cabot Microelectronics and converted into a restricted stock unit award (an "assumed restricted stock unit award") relating to a number of shares of Cabot Microelectronics common stock (rounded to the nearest whole share) equal to (i) the number of shares of KMG common stock subject to such KMG restricted stock unit award immediately prior to the effective time, multiplied by (ii) the "equity award exchange ratio" (defined below). The assumed restricted stock unit awards will be subject to the same terms and conditions as were applicable to the corresponding KMG equity award immediately prior to the effective time (including vesting terms). The "equity award exchange ratio" means the sum of (a) 0.2000 and (b) the quotient (rounded to four decimal places) obtained by dividing (x) \$55.65 by (y) the volume weighted average price per share (calculated to the nearest one-hundredth of one cent) of Cabot Microelectronics common stock on the Nasdaq for the consecutive period of five trading days beginning on the seventh trading day immediately preceding the effective time and concluding at the close of trading on the third trading day immediately preceding the effective time.

See "The Merger Agreement Treatment of KMG Equity Awards" beginning on page 78.

Q: How will I receive the merger consideration to which I am entitled?

A:

After receiving the proper documentation from you, following completion of the merger, the exchange agent for the merger will forward to you the Cabot Microelectronics common stock and cash to which you are entitled. More information on the documentation you are required to deliver to the exchange agent may be found in the section titled "The Merger Agreement Exchange and Payment Procedures" beginning on page 82.

Q: What will happen to KMG as a result of the merger?

A:

If the merger is completed, Merger Sub will be merged with and into KMG, with KMG continuing as the surviving company and a wholly owned subsidiary of Cabot Microelectronics. As a result of the merger, KMG will no longer be a publicly held company. Following the merger, KMG common stock will be delisted from the NYSE and deregistered under the Exchange Act.

Q: Will the Cabot Microelectronics common stock received at the time of completion of the merger be traded on an exchange?

A:

It is a condition to the consummation of the merger that the shares of Cabot Microelectronics common stock to be issued to KMG shareholders in the merger be approved for listing on The Nasdaq Global Select Market, subject to official notice of issuance.

Q: When is the merger expected to be completed?

A:

Cabot Microelectronics and KMG currently expect the merger to be completed near the end of calendar year 2018, subject to receipt of required approval from KMG shareholders and subject to the satisfaction or waiver of the other conditions contained in the merger agreement. However, Cabot Microelectronics and KMG cannot predict the actual date on which the merger will be completed because completion is subject to conditions beyond their control and it is possible that such conditions could result in the merger being completed earlier, later or not at all. See the section titled "The Merger Agreement Conditions to Completion of the Merger" beginning on page 96.

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Q: What am I being asked to vote on?

A:

KMG shareholders are being asked to vote upon the following proposals:

1.

Proposal 1 The Merger Proposal: the proposal to approve and adopt the merger agreement, which is further described in the sections titled "The Merger" beginning on page 45 and "The Merger Agreement" beginning on page 80 and a copy of which is attached to this proxy statement/prospectus as **Annex A**;

2.

Proposal 2 The Adjournment Proposal: the proposal to approve the adjournment of the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the merger proposal; and

3.

Proposal 3 The Compensation Proposal: the proposal to approve, by non-binding, advisory vote, certain compensation arrangements for KMG's named executive officers in connection with the merger.

Q: How does the KMG board of directors recommend that I vote at the special meeting?

A:

The KMG board of directors unanimously recommends that KMG shareholders vote "**FOR**" the merger proposal, "**FOR**" the adjournment proposal and "**FOR**" the compensation proposal.

Q: What do I need to do now?

A:

After carefully reading and considering the information contained in this proxy statement/prospectus, please submit your proxy as soon as possible so that your shares of KMG common stock will be represented and voted at the special meeting. Please follow the instructions set forth on the proxy card or on the voting instruction form provided by the record holder if your shares are held in "street name" by your bank, brokerage firm or other nominee.

Q: Should I send in my KMG stock certificates now?

A:

No. Please DO NOT send your KMG stock certificates with your proxy card. If the merger is completed, you will receive shortly after the time the merger is completed written instructions for exchanging your stock certificates for merger consideration.

Q: Who can vote at the special meeting?

A:

Only KMG shareholders who held shares of record as of the close of business on October 4, the record date for the special meeting, are entitled to receive notice of and to vote at the special meeting. KMG's official stock ownership records will conclusively determine whether a shareholder is a "holder of record" as of the record date.

Q: How many votes do I have?

A:

Each KMG shareholder is entitled to one vote on each matter properly brought before the special meeting for each share of KMG common stock held of record as of the close of business on the record date. As of the close of business on the record date, there were 15,553,484 shares of KMG common stock outstanding and owned by shareholders (*i.e.*, excluding shares of KMG common stock held

in treasury by KMG), held by 359 holders of record.

Q: What constitutes a quorum for the special meeting?

A: A majority of the shares of KMG common stock outstanding as of the close of business on the record date and entitled to vote, present in person or represented by proxy, at the special meeting

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constitutes a quorum for the purposes of the special meeting. Shares of KMG common stock represented at the special meeting but not voted, including shares of KMG common stock for which a shareholder directs an "abstention" from voting, will be counted for purposes of determining a quorum. A quorum is necessary to transact business at the special meeting. Once a share of KMG common stock is represented at the special meeting, it will be counted for the purpose of determining a quorum at the special meeting and any adjournment of the special meeting. However, if a new record date is set for the adjourned special meeting, then a new quorum will have to be determined.

Q: What vote is required to approve each proposal to be considered at the KMG special meeting?

A:

The votes required for each proposal are as follows:

1.

Proposal 1 The Merger Proposal: The approval of the proposal to approve and adopt the merger agreement requires the affirmative vote of the holders of at least a majority of the shares of KMG common stock outstanding on the record date.

2.

Proposal 2 The Adjournment Proposal: The adjournment of the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement requires the affirmative vote of the holders of a majority of the shares of KMG common stock entitled to vote thereon and present in person or represented by proxy, whether or not a quorum is present.

3.

Proposal 3 The Compensation Proposal: The proposal to approve, by non-binding, advisory vote, certain compensation arrangements for KMG's named executive officers in connection with the merger requires the affirmative vote of the holders of a majority of the shares of KMG common stock entitled to vote on the matter at the special meeting and present in person or represented by proxy.

As of the record date, KMG directors and executive officers, as a group, owned and were entitled to vote 1,088,049 shares of KMG common stock, or approximately 7.0% of the outstanding shares of KMG common stock. Christopher T. Fraser, the Chairman of the Board, President and Chief Executive Officer of KMG, and Fred C. Leonard III, a member of KMG's board of directors, have entered into separate voting agreements with Cabot Microelectronics, pursuant to which Mr. Fraser and Mr. Leonard have agreed to, among other matters, vote the shares of KMG common stock held by each of them, representing approximately 4.9% of the shares of KMG common stock outstanding as of the close of business on the record date and entitled to vote at the special meeting, in favor of the merger.

Q: How are proxies counted and what results from a failure to vote, abstention or broker non-vote?

A:

Proposal 1 The Merger Proposal: Votes to abstain will not be counted as votes cast in favor of the proposal to approve and adopt the merger agreement, but will count for the purpose of determining whether a quorum is present. If you fail to submit a proxy or to vote in person at the special meeting, or if you vote to abstain, it will have the same effect as a vote "AGAINST" the proposal to approve and adopt the merger agreement.

Proposal 2 The Adjournment Proposal: If your shares of KMG common stock are present in person at the special meeting, but are not voted on, or if you have given a proxy and abstained on, the proposal to adjourn the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement, this will have the same effect as if you voted "AGAINST" the adjournment of the special meeting, if necessary

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or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement. If you fail to submit a proxy or vote in person at the special meeting, or there are broker non-votes on the proposal, as applicable, the shares of KMG common stock that are not voted will not be counted in respect of, and will not have an effect on, the vote on the adjournment of the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement.

Proposal 3 The Compensation Proposal: If your shares of KMG common stock are present in person at the special meeting, but are not voted on this proposal, or if you have given a proxy and abstained on this proposal, this will have the same effect as if you voted "**AGAINST**" the approval of the proposal. If you fail to submit a proxy or to vote in person at the special meeting, or there are broker non-votes on the proposal, as applicable, the shares of KMG common stock held by you or your bank, brokerage firm or other nominee will not be counted in respect of, and will not have an effect on, the proposal to approve, by non-binding, advisory vote, certain compensation arrangements for KMG's named executive officers in connection with the merger.

Q: How do I vote or have my shares voted?

A:

KMG shareholders of record may vote their shares of KMG common stock or submit a proxy to have their shares of KMG common stock voted at the special meeting in one of the following ways:

by telephone or over the Internet, by accessing the telephone number or Internet website specified on the enclosed proxy card. The control number provided on your proxy card is designed to verify your identity when voting by telephone or by Internet. Please be aware that if you vote by telephone or over the Internet, you may incur costs such as telephone and Internet access charges for which you will be responsible;

by completing, signing, dating and returning the enclosed proxy card in the accompanying prepaid reply envelope; or

in person, by attending the special meeting and casting your vote there.

If you are a beneficial owner, you will receive instructions from your bank, brokerage firm or other nominee that you must follow in order to have your shares of KMG common stock voted. Those instructions will identify which of the above choices are available to you in order to have your shares voted. Please note that if you are a beneficial owner and wish to vote in person at the special meeting, you must provide a legal proxy from your bank, brokerage firm or other nominee at the special meeting.

Q: How will my proxy be voted?

A:

If you vote by proxy, regardless of the method you choose to vote, the individuals named on the enclosed proxy card, and each of them, with full power of substitution, will vote your shares of KMG common stock in the way that you indicate. When completing the Internet or telephone processes or the proxy card, you may specify whether your shares of KMG common stock should be voted for or against or to abstain from voting on all, some or none of the specific items of business to come before the special meeting.

If you properly sign your proxy card but do not mark the boxes showing how your shares of KMG common stock should be voted on a matter, the shares of KMG common stock represented by your properly signed proxy will be voted "**FOR**" the proposal to approve and adopt the merger agreement, "**FOR**" the adjournment of the special meeting, if necessary or appropriate, to solicit

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additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement, and **"FOR"** the proposal to approve, by non-binding, advisory vote, certain compensation arrangements for KMG's named executive officers in connection with the merger.

Q: What must I bring to attend the special meeting?

A:

Only KMG shareholders of record as of the close of business on the record date, their duly authorized proxy holders, beneficial owners with proof of ownership and guests of KMG may attend the special meeting. If your shares of KMG common stock are held through a bank, brokerage firm or other nominee, please bring proof of your beneficial ownership of such shares to the special meeting. Acceptable proof could include an account statement showing that you owned shares of KMG common stock on the record date. If you are the representative of a corporate or institutional shareholder, you must present valid photo identification along with proof that you are the representative of such shareholder. Please note that cameras, recording devices and other electronic devices will not be permitted at the special meeting.

Q: What is the difference between holding shares as a shareholder of record and in "street name"?

A:

If your shares of KMG common stock are registered directly in your name with the transfer agent of KMG, Broadridge Corporate Issuer Solutions, you are considered, with respect to those shares of KMG common stock, the shareholder of record. If you are a shareholder of record, this proxy statement/prospectus and the enclosed proxy card have been sent directly to you by KMG.

If your shares of KMG common stock are held through a bank, brokerage firm or other nominee, you are considered the beneficial owner of shares of KMG common stock held in "street name." In that case, this proxy statement/prospectus has been forwarded to you by your bank, brokerage firm or other nominee who is considered, with respect to those shares of KMG common stock, the shareholder of record. As the beneficial owner, you have the right to direct your bank, brokerage firm or other nominee how to vote your shares by following their instructions for voting.

Q: If my shares are held in "street name" by my bank, brokerage firm or other nominee, will my bank, brokerage firm or other nominee vote my shares for me?

A:

Under the rules of the NYSE, banks, brokerage firms or other nominees who hold shares in "street name" for customers have the authority to vote on "routine" proposals when they have not received instructions from beneficial owners. However, banks, brokerage firms and other nominees are precluded from exercising their voting discretion with respect to approving non-routine matters such as the approval of the proposal to approve and adopt the merger agreement, the adjournment of the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement, and the proposal to approve, by non-binding, advisory vote, certain compensation arrangements for KMG's named executive officers in connection with the merger. As a result, absent specific instructions from the beneficial owner of such shares of KMG common stock, banks, brokerage firms and other nominees are not empowered to vote those shares of KMG common stock on non-routine matters. These broker non-votes will have the same effect as a vote **"AGAINST"** the proposal to approve and adopt the merger agreement, but will not be counted in respect of, and will not have an effect on, the vote on the adjournment of the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement, or the proposal to approve, by non-binding, advisory vote, certain compensation arrangements for the named executive officers of KMG in connection with the merger.

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Q: What should I do if I receive more than one set of voting materials for the special meeting?

A:

You may receive more than one set of voting materials for the special meeting, including multiple copies of this proxy statement/prospectus and multiple proxy cards or voting instruction cards. For example, if you hold your KMG common stock in more than one brokerage account, you will receive a separate voting instruction card for each brokerage account in which you hold shares. If you are a shareholder of record and your shares are registered in more than one name, you will receive more than one proxy card. Please submit each separate proxy or voting instruction card that you receive by following the instructions set forth in each separate proxy or voting instruction card.

Q: What do I do if I am a KMG shareholder and I want to revoke my proxy?

A:

You have the right to revoke a proxy, whether delivered over the Internet, by telephone or by mail, at any time before it is exercised, by voting again at a later date through any of the methods available to you, by attending the special meeting and voting in person, or by giving written notice of revocation to KMG prior to the time the special meeting begins. Written notice of revocation should be mailed to: KMG Chemicals, Inc., Attention: Corporate Secretary, 300 Throckmorton Street, Fort Worth, Texas 76102.

Q: What happens if I sell my shares of KMG common stock before the special meeting?

A:

The record date is earlier than both the date of the special meeting and the closing of the merger. If you transfer your shares of KMG common stock after the record date but before the special meeting, you will, unless the transferee requests a proxy from you, retain your right to vote at the special meeting but will transfer the right to receive the per share merger consideration to the person to whom you transfer your shares. In order to receive the merger consideration, you must hold your shares upon completion of the merger.

Q: Do KMG shareholders have dissenters' rights?

A:

Yes. KMG shareholders are entitled to dissenters' rights under Chapter 10, Subchapter H of the Texas Business Organizations Code (the "TBOC"), provided they (i) do not vote in favor of the proposal to approve and adopt the merger agreement, (ii) object in writing to the merger prior to the special meeting and (iii) follow the procedures and satisfy the conditions set forth in Chapter 10, Subchapter H of the TBOC. For more information regarding dissenters' rights, see the section titled "Dissenters' Rights of KMG Shareholders" beginning on page 136. In addition, a copy of Chapter 10, Subchapter H of the TBOC is attached as **Annex D** to this proxy statement/prospectus. Failure to strictly comply with Chapter 10, Subchapter H of the TBOC may result in your waiver of, or inability to, exercise dissenters' rights.

Q: Who will solicit and pay the cost of soliciting proxies?

A:

KMG has engaged Okapi Partners LLC to assist in the solicitation of proxies for the special meeting. KMG estimates that it will pay Okapi Partners LLC a fee of \$30,000 plus an additional fee of \$5.00 per incoming and outgoing telephone contact and telephonic votes received. KMG has agreed to reimburse Okapi Partners LLC for certain out-of-pocket fees and expenses and also will indemnify Okapi Partners LLC against certain claims, costs, damages, liabilities, judgments and expenses. KMG also may reimburse banks, brokerage firms, other nominees or their respective agents for their expenses in forwarding proxy materials to beneficial owners of KMG common stock. KMG's directors, officers and employees also may solicit proxies by telephone, by facsimile, by mail, on the Internet or in person. They will not be paid any additional amounts for soliciting proxies.

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Q: How can I find more information about Cabot Microelectronics and KMG?

A: You can find more information about Cabot Microelectronics and KMG from various sources described in the section titled "Where You Can Find More Information" beginning on page 146.

Q: Who can answer any questions I may have about the special meeting or the proxy materials?

A: If you have additional questions about the merger, need assistance in submitting your proxy or voting your shares of KMG common stock or need additional copies of this proxy statement/prospectus or the enclosed proxy card, please contact:

**Okapi Partners LLC
1212 Avenue of the Americas, 24th Floor
New York, New York 10036
Banks and Brokerage Firms, Please Call: (212) 297-0720
Shareholders and All Others Call Toll-Free: (855) 305-0856**

Email: info@okapipartners.com

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SUMMARY

The following summary highlights selected information described in more detail elsewhere in this proxy statement/prospectus and the documents incorporated by reference into this proxy statement/prospectus and may not contain all the information that may be important to you. To understand the merger and the matters being voted on by KMG shareholders at the special meeting more fully, and to obtain a more complete description of the legal terms of the merger agreement, you should carefully read this entire proxy statement/prospectus, including the annexes, and the documents to which Cabot Microelectronics and KMG refer you. Each item in this summary includes a page reference directing you to a more complete description of that topic. See "Where You Can Find More Information" beginning on page 146.

The Parties (see pages 32 and 33)

KMG Chemicals, Inc.

KMG Chemicals, Inc., a Texas corporation, is headquartered in Fort Worth, Texas. From its facilities in North America, Europe and Asia, KMG produces and distributes specialty chemicals and performance materials for the semiconductor, industrial wood preservation and pipeline and energy markets. KMG common stock trades on the NYSE under the symbol "KMG." The principal executive offices of KMG are located at 300 Throckmorton Street, Fort Worth, Texas 76102, and its telephone number is (817) 761-6100.

Cabot Microelectronics Corporation

Cabot Microelectronics Corporation, a Delaware corporation, is the leading supplier of high-performance polishing slurries and second largest supplier of polishing pads used in the manufacture of advanced integrated circuit (IC) devices within the semiconductor industry, in a process called chemical mechanical planarization (CMP). CMP is a polishing process used by IC device manufacturers to planarize or flatten many of the multiple layers of material that are deposited upon silicon wafers in the production of advanced ICs. Cabot Microelectronics' products play a critical role in the production of advanced semiconductor devices, helping to enable its customers to produce smaller, faster and more complex IC devices with fewer defects. Cabot Microelectronics' mission is to create value by delivering high-performing and innovative solutions that solve its customers' challenges. Cabot Microelectronics common stock trades on the Nasdaq under the symbol "CCMP." The principal executive offices of Cabot Microelectronics are located at 870 North Commons Drive, Aurora, Illinois 60504, and its telephone number is (630) 375-6631.

Cobalt Merger Sub Corporation

Cobalt Merger Sub Corporation, a Texas corporation and referred to in this proxy statement/prospectus as Merger Sub, is a wholly owned subsidiary of Cabot Microelectronics. Merger Sub was formed by Cabot Microelectronics solely in contemplation of the merger, has not conducted any business and has no assets, liabilities or obligations of any nature other than as set forth in the merger agreement. The principal executive offices of Merger Sub are located at c/o Cabot Microelectronics Corporation, 870 North Commons Drive, Aurora, Illinois 60504, and its telephone number is (630) 375-6631.

The Merger and the Merger Agreement (see pages 45 and 80)

The terms and conditions of the merger are contained in the merger agreement, a copy of which is attached as **Annex A** to this proxy statement/prospectus. KMG and Cabot Microelectronics encourage you to read the merger agreement carefully and in its entirety, as it is the legal document that governs the merger.

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The merger agreement provides that, subject to the terms and conditions of the merger agreement, Merger Sub will be merged with and into KMG, with KMG surviving the merger as a wholly owned subsidiary of Cabot Microelectronics.

The Voting Agreements (see page 101)

In connection with the merger agreement, Cabot Microelectronics entered into voting agreements with Christopher T. Fraser and Fred C. Leonard III, copies of which are attached as **Annex B** to this proxy statement/prospectus. Pursuant to the voting agreements, each of Messrs. Fraser and Leonard has agreed to vote their shares of KMG common stock in favor of the merger agreement, subject to certain exceptions. As of the record date, Messrs. Fraser and Leonard collectively owned and were entitled to vote 754,554 shares of KMG common stock, or approximately 4.9% of the outstanding shares of KMG common stock.

Per Share Merger Consideration (see page 45)

Upon completion of the merger, each issued and outstanding share of KMG common stock (other than shares (i) held in treasury by KMG or owned by Cabot Microelectronics or Merger Sub (which will be cancelled), (ii) owned by any direct or indirect wholly owned subsidiary of KMG or Cabot Microelectronics (other than Merger Sub) (which will be converted into shares of the surviving company), (iii) owned by shareholders that have complied with the applicable provisions of Chapter 10, Subchapter H of the TBOC, or (iv) underlying KMG restricted stock awards granted after August 14, 2018) will be converted into the right to receive \$55.65 in cash, plus 0.2000 shares of Cabot Microelectronics common stock, in each case, without interest and less any applicable withholding taxes. Each KMG shareholder who would otherwise have been entitled to receive a fractional share of Cabot Microelectronics common stock in the merger will instead receive a cash payment in lieu of such fractional share.

Based on the closing price of Cabot Microelectronics common stock on August 14, 2018, the last full trading day before the public announcement of the merger, the per share value of KMG common stock implied by the per share merger consideration is \$79.93. Based on the closing price of Cabot Microelectronics common stock on October 4, the most recent practicable date prior to the date of this proxy statement/prospectus, the per share value of KMG common stock implied by the per share merger consideration is \$76.06. The implied value of the per share merger consideration will fluctuate as the market price of Cabot Microelectronics common stock fluctuates because a portion of the per share merger consideration is payable in a fixed number of shares of Cabot Microelectronics common stock. As a result, the value of the per share merger consideration that KMG shareholders will receive upon completion of the merger could be greater than, less than or the same as the value of the merger consideration on the date of this proxy statement/prospectus or at the time of the KMG special meeting. Accordingly, you should obtain current stock price quotations for Cabot Microelectronics common stock and KMG common stock before deciding how to vote with respect to approval of the merger proposal. Cabot Microelectronics common stock trades on the Nasdaq under the symbol "CCMP," and KMG common stock trades on the NYSE under the symbol "KMG."

KMG Special Meeting (see page 34)

Time, Place and Purpose of the Special Meeting

The special meeting to consider and vote upon the proposal to approve and adopt the merger agreement will be held on November 13, 2018, at 10:00 a.m. (Central Time), at The Worthington Renaissance Fort Worth Hotel, 200 Main Street, Fort Worth, Texas 76102.

At the special meeting, KMG shareholders will be asked to consider and vote upon (i) a proposal to approve and adopt the merger agreement, (ii) the adjournment of the special meeting, if necessary

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or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement and (iii) a proposal to approve, by non-binding, advisory vote, certain compensation arrangements for KMG's named executive officers in connection with the merger.

Record Date and Quorum

You are entitled to receive notice of, and to vote at, the special meeting if you owned shares of KMG common stock as of the close of business on October 4, 2018, the record date. On the record date, there were 15,553,484 shares of KMG common stock outstanding and entitled to vote. You will have one vote on all matters properly coming before the special meeting for each share of KMG common stock that you owned on the record date.

A majority of the shares of KMG common stock outstanding as of the close of business on the record date and entitled to vote, present in person or represented by proxy, at the special meeting constitutes a quorum for the purposes of the special meeting. Shares of KMG common stock represented at the special meeting but not voted, including shares of KMG common stock for which a shareholder directs an "abstention" from voting, will be counted for purposes of determining a quorum. A quorum is necessary to transact business at the special meeting. Once a share of KMG common stock is represented at the special meeting, it will be counted for the purpose of determining a quorum at the special meeting and any adjournment of the special meeting. However, if a new record date is set for the adjourned special meeting, then a new quorum will have to be determined.

Required Vote

The approval of the proposal to approve and adopt the merger agreement requires the affirmative vote of the holders of at least a majority of the shares of KMG common stock outstanding on the record date. Votes to abstain will not be counted as votes cast in favor of the proposal to approve and adopt the merger agreement, but will count for the purpose of determining whether a quorum is present. If you fail to submit a proxy or to vote in person at the special meeting, or if you vote to abstain, it will have the same effect as a vote "**AGAINST**" the proposal to approve and adopt the merger agreement.

Approval of the adjournment of the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement will require the affirmative vote of the holders of a majority of the shares of KMG common stock entitled to vote thereon and present in person or represented by proxy, whether or not a quorum is present. For purposes of the vote on the adjournment of the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement, if your shares of KMG common stock are present in person at the special meeting but are not voted on, or if you have given a proxy and abstained on, the adjournment of the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement, this will have the same effect as if you voted "**AGAINST**" the adjournment of the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement. If you fail to submit a proxy or vote in person at the special meeting, or there are broker non-votes on the issue, as applicable, the shares of KMG common stock that are not voted will not be counted in respect of, and will not have an effect on, the vote on the adjournment of the special meeting, if necessary or appropriate, to solicit additional proxies if there are

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insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement.

The approval of the proposal to approve, by non-binding, advisory vote, certain compensation arrangements for KMG's named executive officers in connection with the merger requires the affirmative vote of the holders of a majority of the shares of KMG common stock entitled to vote on the matter at the special meeting and present in person or represented by proxy. For purposes of the proposal, if your shares of KMG common stock are present in person at the special meeting but are not voted on this proposal, or if you have given a proxy and abstained on this proposal, this will have the same effect as if you voted "**AGAINST**" the approval of the proposal. If you fail to submit a proxy or to vote in person at the special meeting, or there are broker non-votes on the issue, as applicable, the shares of KMG common stock held by you or your bank, brokerage firm or other nominee will not be counted in respect of, and will not have an effect on, the proposal to approve, by non-binding, advisory vote, certain compensation arrangements for KMG's named executive officers in connection with the merger.

As of the record date, the directors and executive officers of KMG were entitled to vote, in the aggregate, 1,088,049 shares of KMG common stock, representing 7.0% of the outstanding shares of KMG common stock as of the close of business on the record date. The directors and executive officers of KMG have informed KMG that they currently intend to vote all such shares of KMG common stock "**FOR**" the proposal to approve and adopt the merger agreement, "**FOR**" the adjournment of the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement and "**FOR**" the proposal to approve, by non-binding, advisory vote, certain compensation arrangements for KMG's named executive officers in connection with the merger.

Proxies and Revocations

Any shareholder of record entitled to vote at the special meeting may submit a proxy by telephone, over the Internet, by returning the enclosed proxy card in the accompanying prepaid reply envelope or may vote in person by appearing at the special meeting. If your shares of KMG common stock are held in "street name" through a bank, brokerage firm or other nominee, you should instruct your bank, brokerage firm or other nominee on how to vote your shares of KMG common stock using the instructions provided by your bank, brokerage firm or other nominee. If you fail to submit a proxy or to vote in person at the special meeting, or do not provide your bank, brokerage firm or other nominee with instructions as to how to vote your shares, as applicable, your shares of KMG common stock will not be voted on the approval of the proposal to approve and adopt the merger agreement, which will have the same effect as a vote "**AGAINST**" the proposal to approve and adopt the merger agreement, and your shares of KMG common stock will not have an effect on the vote to adjourn the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement or on the proposal to approve, by non-binding, advisory vote, certain compensation arrangements for KMG's named executive officers in connection with the merger. Please note that if you are a beneficial owner and wish to vote in person at the special meeting, you must provide a legal proxy from your bank, brokerage firm or other nominee at the special meeting.

You have the right to revoke a proxy, whether delivered by telephone, over the Internet or by mail, at any time before it is exercised, by voting again at a later date through any of the methods available to you, by attending the special meeting and voting in person, or by giving written notice of revocation to KMG prior to the time the special meeting begins. Written notice of revocation should be mailed to: KMG Chemicals, Inc., Attention: Corporate Secretary, 300 Throckmorton Street, Fort Worth, Texas 76102.

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KMG's Reasons for the Merger; Recommendation of the KMG Board of Directors (see page 51)

After careful evaluation of the merger agreement and the transactions contemplated thereby, including the merger, the KMG board of directors unanimously determined that the merger agreement and the transactions contemplated thereby, including the merger, are in the best interests of KMG and its shareholders and approved and declared advisable the merger agreement and the other transactions contemplated thereby, including the merger.

The KMG board of directors unanimously recommends that KMG shareholders vote "FOR" the proposal to approve and adopt the merger agreement, "FOR" the adjournment of the special meeting, if necessary or appropriate, to solicit additional proxies if there are insufficient votes at the time of the special meeting (or any adjournment or postponement) to approve the proposal to approve and adopt the merger agreement and "FOR" the proposal to approve, by non-binding, advisory vote, certain compensation arrangements for KMG's named executive officers in connection with the merger.

In the course of reaching its recommendation, the KMG board of directors consulted with KMG's senior management and financial advisor, KeyBanc Capital Markets Inc. ("KBCM") and outside legal counsel and considered a number of factors. See "The Merger KMG's Reasons for the Merger; Recommendation of the KMG Board of Directors" beginning on page 51.

Opinion of KeyBanc Capital Markets Inc. (KBCM) (see page 59)

KBCM was retained by the KMG board of directors to act as financial advisor in connection with the merger. On August 14, 2018, KBCM rendered its oral opinion, which was subsequently confirmed in a written opinion dated August 14, 2018, to the KMG board of directors to the effect that, as of such date, and based upon and subject to the assumptions made, procedures followed, matters considered and qualifications and limitations on the scope of review undertaken by KBCM as set forth in its written opinion, the merger consideration to be paid to the holders of KMG common stock pursuant to the merger agreement was fair from a financial point of view to such holders of KMG common stock.

The full text of KBMC's written opinion to the KMG board of directors, dated August 14, 2018, is attached to this proxy statement/prospectus as **Annex C** and is incorporated by reference herein. The written opinion sets forth, among other things, the assumptions made, procedures followed, matters considered and limitations and qualifications of the review undertaken by KBMC in rendering its opinion. You should read the written opinion carefully in its entirety. The opinion was provided to the KMG board of directors and addresses only, as of the date of the written opinion, the fairness, from a financial point of view, of the merger consideration to be paid to the holders of the KMG common stock pursuant to the merger agreement, and it does not address any other aspect of the proposed transaction. It does not constitute a recommendation as to how any shareholder should vote with respect to the merger or any other matter, and does not in any manner address the price at which the KMG common stock or Cabot Microelectronics common stock will trade at any future time. The summary of the written opinion set forth herein is qualified in its entirety by reference to the full text of the written opinion. See the section entitled "The Merger Opinion of KeyBanc Capital Markets Inc. (KBCM)" beginning on page 59 of this proxy statement/prospectus.

Interests of KMG's Directors and Executive Officers in the Merger (see page 69)

The directors and executive officers of KMG may have interests in the merger that are different from or in addition to those of KMG shareholders generally. These interests include the continued employment of certain executive officers of KMG, the treatment in the merger of performance-based and time-based awards granted under any agreement, which we refer to as KMG equity awards, annual bonus and retention bonus awards, employment agreements, the executive severance plan and other rights held by KMG's directors and executive officers, and the indemnification of former KMG

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directors and officers by Cabot Microelectronics. The KMG board was aware of and considered these interests when it declared advisable the merger agreement and the transactions contemplated thereby, including the merger and the voting agreements, determined that the terms of the merger agreement, and the transactions contemplated by the merger agreement, including the merger, were in the best interests of KMG and its shareholders, and recommended that KMG shareholders approve and adopt the merger agreement and the transactions contemplated thereby, including the merger. See the sections entitled "The Merger Interests of KMG, Directors and Executive Officers in the Merger" beginning on page 69 of this proxy statement/prospectus and "Proposal 3: The Compensation Proposal" beginning on page 41 of this proxy statement/prospectus.

Material U.S. Federal Income Tax Consequences of the Merger (see page 72)

The receipt of cash and shares of Cabot Microelectronics common stock pursuant to the merger will be a taxable transaction for U.S. federal income tax purposes. For U.S. federal income tax purposes, a U.S. holder (as defined below in the section titled "The Merger Material U.S. Federal Income Tax Consequences" beginning on page 72) will generally recognize gain or loss equal to the difference, if any, between (i) the sum of the cash and the fair market value (as of the effective time) of the Cabot Microelectronics common stock received in the merger and (ii) the U.S. holder's adjusted tax basis in the KMG common stock surrendered in exchange therefor. Non-U.S. holders (as defined below in the section titled "The Merger Material U.S. Federal Income Tax Consequences" beginning on page 72) that receive the per share merger consideration pursuant to the merger may be subject to U.S. withholding tax with respect to any cash received.

Each holder of KMG common stock should read the discussion under "The Merger Material U.S. Federal Income Tax Consequences" beginning on page 72 for a more complete discussion of the U.S. federal income tax consequences of the merger. Tax matters can be complicated, and the tax consequences of the merger to a particular holder of KMG common stock will depend on such holder's particular facts and circumstances. Holders of KMG common stock should consult their own tax advisors to determine the specific consequences to them of exchanging their shares of KMG common stock for cash and shares of Cabot Microelectronics common stock pursuant to the merger.

Accounting Treatment of the Merger (see page 72)

Cabot Microelectronics prepares its financial statements in accordance with accounting principles generally accepted in the United States of America (referred to in this proxy statement/prospectus as GAAP). The merger will be accounted for using the acquisition method of accounting. Cabot Microelectronics will be treated as the acquirer for accounting purposes.

Regulatory Approvals Required to Complete the Merger (see pages 76 and 97)

Under the Hart-Scott-Rodino Antitrust Improvements Act of 1976 (as amended, the "HSR Act"), and the rules and regulations promulgated thereunder by the Federal Trade Commission (the "FTC"), the merger cannot be consummated until notifications have been submitted and certain information has been furnished to the Antitrust Division of the U.S. Department of Justice (the "Antitrust Division") and the FTC, and specified waiting period requirements have been satisfied. Cabot Microelectronics and KMG each filed a pre-merger notification and report form pursuant to the HSR Act with the Antitrust Division and the FTC on August 23, 2018. On September 4, 2018, Cabot Microelectronics and KMG each received notice that the FTC granted early termination of the applicable waiting period under the HSR Act. Accordingly, the regulatory condition relating to the expiration or termination of the waiting period (and any extension thereof) under the HSR Act in respect of the merger has been satisfied.

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Cabot Microelectronics and KMG have agreed to use reasonable best efforts to obtain as promptly as reasonably practicable any consents and approvals of, or the expiration of waiting periods applicable to, any third party, including any governmental entity, necessary, proper or advisable in connection with the merger, subject to limitations as set forth in the merger agreement. See "The Merger Agreement Regulatory Approvals" beginning on page 97 of this proxy statement/prospectus.

Litigation Relating to the Merger (see page 77)

On September 24, 2018, a putative shareholder class action was filed in the United States District Court for the Northern District of Texas styled *Richard Walter, individually and on behalf of all others similarly situated, v. KMG Chemicals, Inc., et. al.*, No. 4:18-cv-00785 (the "Walter Lawsuit"). The Walter Lawsuit asserts claims for alleged violation of Section 14(a) of the Exchange Act based on allegations that this proxy statement/prospectus is materially incomplete and misleading. KMG and Cabot Microelectronics believe the allegations are without merit.

Expected Timing of Merger

Cabot Microelectronics and KMG currently expect the merger to be completed near the end of calendar year 2018, subject to receipt of required approval from KMG shareholders and subject to the satisfaction or waiver of the other conditions contained in the merger agreement. However, Cabot Microelectronics and KMG cannot predict the actual date on which the merger will be completed because completion is subject to conditions beyond their control and it is possible that such conditions could result in the merger being completed earlier, later or not at all, as described in more detail in the section titled "The Merger Agreement Conditions to Completion of the Merger" beginning on page 96.

Treatment of KMG Equity Awards (see pages 78 and 84)

Immediately prior to the effective time, each restricted stock unit award relating to shares of KMG common stock that was granted prior to August 14, 2018 and that is outstanding as of immediately prior to the effective time will fully vest (with any applicable performance metrics deemed satisfied based on the level of achievement specified in the applicable award agreement) and be cancelled and converted in exchange for the right to receive the merger consideration in respect of each share of KMG common stock underlying the applicable restricted stock unit award.

Immediately prior to the effective time, each restricted unit award relating to shares of KMG common stock that was granted on or following August 14, 2018 and that is outstanding as of immediately prior to the effective time will be assumed by Cabot Microelectronics and converted into a restricted stock unit award relating to a number of shares of Cabot Microelectronics common stock (rounded to the nearest whole share) equal to (i) the number of shares of KMG common stock subject to such KMG restricted stock unit award immediately prior to the effective time, multiplied by (ii) the "equity award exchange ratio" (defined below). The assumed restricted stock unit awards will be subject to the same terms and conditions as were applicable to the corresponding KMG equity award immediately prior to the effective time (including vesting terms). The "equity award exchange ratio" means the sum of (a) 0.2000 and (b) the quotient (rounded to four decimal places) obtained by dividing (x) \$55.65 by (y) the volume weighted average price per share (calculated to the nearest one-hundredth of one cent) of Cabot Microelectronics common stock on the Nasdaq for the consecutive period of five trading days beginning on the seventh trading day immediately preceding the effective time and concluding at the close of trading on the third trading day immediately preceding the effective time.

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Financing of the Merger (see pages 76 and 93)

Consummation of the merger is not conditioned upon Cabot Microelectronics' ability to obtain financing. Cabot Microelectronics expects to use cash on hand and debt financing to fund the cash component of the merger consideration.

In connection with the execution of the merger agreement, Cabot Microelectronics entered into a commitment letter, dated as of August 14, 2018 (the "commitment letter"), with JPMorgan Chase Bank, N.A., Bank of America, N.A., Goldman Sachs Bank USA and Merrill Lynch, Pierce, Fenner & Smith Incorporated (together, the "commitment parties"), pursuant to which the commitment parties have committed to arrange and provide, subject to the terms and conditions set forth in the commitment letter, a senior secured revolving credit facility in an aggregate principal amount of up to \$200,000,000 (the "revolver") and a senior secured term loan facility in an aggregate principal amount of up to \$1,065,000,000 (the "term loan").

Prior to or simultaneously with the consummation of the merger, Cabot Microelectronics expects to execute definitive documentation with respect to the revolver and term loan on the terms set forth in the commitment letter. The proceeds of the term loan and, subject to certain limitations, the revolver may be used to finance the merger, repay certain existing indebtedness of Cabot Microelectronics and KMG, to pay fees and expenses related to the merger and for general corporate purposes.

Listing of Cabot Microelectronics Common Stock; Delisting of KMG Common Stock (see page 79)

It is a condition to the consummation of the merger that the shares of Cabot Microelectronics common stock to be issued to KMG shareholders in the merger be approved for listing on the Nasdaq, subject to official notice of issuance. As a result of the merger, shares of KMG common stock will cease to be listed on the NYSE.

Dissenters' Rights of KMG Shareholders (see page 136)

The holders of KMG common stock have the right under Texas law to dissent from the merger and have the appraised fair value of their shares of KMG common stock as of the date immediately preceding the effective date of the merger paid to them in cash. The appraised fair value of any particular number of shares of KMG common stock as of such date may be more or less than the value of the merger consideration that a holder of that particular number of shares of KMG common stock would be issued in the merger in exchange for that particular number of shares of KMG common stock pursuant to the merger agreement.

In order to dissent, the holder of KMG common stock must carefully follow the requirements under Chapter 10, Subchapter H of the TBOC governing dissenters' rights, including providing KMG, prior to the KMG special meeting, with a written objection to the merger that states that he or she will exercise his or her right to dissent with respect to his or her shares of KMG common stock if the holders of the KMG common stock approve and adopt the merger agreement and the merger is completed. The provisions of the TBOC pertaining to dissenters' rights are attached to this proxy statement/prospectus as **Annex D** and the summaries of those provisions in this proxy statement/prospectus should be read in conjunction with, and are qualified in their entirety by, those provisions of the TBOC. Persons having beneficial interests in KMG common stock held of record in the name of another person, such as a broker, bank or other nominee, must act promptly to cause the record holder to take the actions required under Texas law to exercise their dissenter's rights.

If you intend to exercise dissenters' rights as to shares of KMG common stock that you hold, you should read the provisions of the TBOC governing dissenters' rights carefully and consult with your own legal counsel. Each holder of KMG common stock should also remember that if he or she returns

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a signed proxy card, but fails to provide instructions on that proxy card as to how his or her shares of KMG common stock are to be voted against the approval of the merger agreement and the merger, such KMG shareholder's shares of KMG common stock will be considered to have voted in favor of the merger agreement and the merger. In that event, such KMG shareholder will not be able to assert dissenters' rights as to his or her shares of KMG common stock.

If the KMG shareholders approve and adopt the merger agreement, a holder of KMG common stock who (i) delivers to the president and the secretary of KMG a written objection to the merger prior to the KMG special meeting that states that such holder will exercise his or her right to dissent if the merger agreement and the merger are approved and the merger is completed and includes an address for notice of the effectiveness of the merger, (ii) votes his or her shares of KMG common stock against approval of the merger agreement and the merger at the KMG special meeting, (iii) not later than the 20th day after Cabot Microelectronics sends such holder notice that the merger was completed, delivers to the president and secretary of Cabot Microelectronics a written demand for payment of the fair value of his or her shares of KMG common stock, which demand states he or she holds shares of KMG common stock and states the number of shares of KMG common stock such holder owns, his or her estimate of the fair value of such shares and an address to which a notice relating to the dissent and appraisal procedures may be sent, and (iv) not later than the 20th day after he or she makes that demand for payment, submits to Cabot Microelectronics the certificates representing his or her shares of KMG common stock will be entitled under the TBOC to receive the appraised fair value of his or her shares of KMG common stock as of the date immediately prior to the effective time of the merger.

No Solicitation of KMG Takeover Proposals (see page 90)

As more fully described in this proxy statement/prospectus and in the merger agreement, and subject to the exceptions summarized below, KMG has agreed that it will not (i) solicit, initiate or knowingly encourage or knowingly facilitate any inquiry regarding, or the making of any proposal or offer that constitutes, or would reasonably be expected to lead to, a KMG takeover proposal (as defined on page 90), (ii) engage in, continue or otherwise participate in any discussions or negotiations, or furnish to any other person any information in connection with a KMG takeover proposal or (iii) approve, adopt, recommend or enter into (or propose to do any of the foregoing) any letter of intent, agreement or commitment with respect to a KMG takeover proposal.

Notwithstanding the foregoing restrictions, if at any time prior to obtaining the approval of the KMG shareholders of the proposal to approve and adopt the merger agreement, KMG receives a written, bona fide, unsolicited takeover proposal that did not result from a material breach of KMG's non-solicitation obligations, KMG may (i) furnish information with respect to KMG to the party making the KMG takeover proposal (subject to certain conditions and obligations described below) and (ii) engage in discussions or negotiations with the party making such KMG takeover proposal, if, and only if, the KMG board of directors determines in good faith, after consultation with its independent financial advisor and outside legal counsel, that the KMG takeover proposal constitutes or would reasonably be expected to lead to a KMG superior proposal (as defined on page 91) and that the failure to take such action would be inconsistent with the KMG board of directors' fiduciary duties under applicable law.

KMG agreed to promptly (and in any event within 24 hours) notify Cabot Microelectronics if the KMG board of directors makes a determination that a KMG takeover proposal constitutes or is reasonably expected to lead to a KMG superior proposal or if KMG furnishes nonpublic information and/or enters into discussions or negotiations with a person making a KMG takeover proposal.

KMG also agreed to promptly (and in any event within 24 hours after, to the knowledge of KMG, its receipt) notify Cabot Microelectronics of the receipt of a KMG takeover proposal or any request for

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information relating to KMG or other inquiry or communication that is reasonably likely to lead to a KMG takeover proposal. Such notice must include the identity of the person or persons making the KMG takeover proposal (or the related proposal or inquiry) and the material terms thereof. Further, after giving such a notice, KMG must keep Cabot Microelectronics reasonably informed, on a current basis, as to the status of any KMG takeover proposal (including any material developments, discussions or negotiations related thereto) by promptly (and in any event within 24 hours after receipt) providing Cabot Microelectronics copies of any correspondence, proposals, indications of interest, and/or draft agreements relating to such KMG takeover proposal.

No Change in Recommendation or Termination for a Company Superior Proposal (see page 92)

The merger agreement provides that, subject to certain exceptions, the KMG board of directors will not (i) fail to include the KMG board of directors recommendation in this proxy statement/prospectus; (ii) change, qualify, withhold, withdraw or modify the KMG board of directors recommendation (or authorize or publicly propose to do so); (iii) fail to recommend against any KMG takeover proposal that is a tender or exchange offer within ten business days of such tender or exchange offer; or (iv) adopt, approve or recommend to KMG shareholders a KMG takeover proposal (or resolve or publicly propose or announce its intention to do so).

Company Superior Proposals; Intervening Events (see page 92)

However, at any time before approval by KMG shareholders of the proposal to approve and adopt the merger agreement is obtained, the KMG board of directors may, with respect to a bona fide, unsolicited KMG takeover proposal that did not result from a material breach by KMG of its non-solicitation obligations under the merger agreement, make a KMG adverse recommendation change (following compliance with the obligation to provide an opportunity to Cabot Microelectronics to make a revised proposal as described below), if, and only if, the KMG board of directors determines in good faith, after consultation with KMG's independent financial advisors and outside legal counsel, that (i) such KMG takeover proposal constitutes a KMG superior proposal or (ii) the failure to make a KMG adverse recommendation change would be inconsistent with the KMG board of directors' fiduciary duties under applicable law.

In addition, at any time before approval by KMG shareholders of the proposal to approve and adopt the merger agreement is obtained, the KMG board of directors may, in response to a KMG intervening event (as defined on page 92), make a KMG adverse recommendation change (following compliance with the obligation to provide an opportunity to Cabot Microelectronics to make a revised proposal), if, and only if, the KMG board of directors determines in good faith, after consultation with KMG's independent financial advisors and outside legal counsel, that the failure to make a KMG adverse recommendation change would be inconsistent with the KMG board of directors' fiduciary duties under applicable law.

Prior to making any KMG adverse recommendation change, (i) the KMG board of directors must provide Cabot Microelectronics four business days' prior written notice of any intention to take such action (specifying, among other things, the identity of the person making a KMG takeover proposal and copies of the related agreements, if any, or the KMG intervening event, as applicable); (ii) during the four business days following the delivery of such written notice, KMG must consider in good faith any revisions or changes to the merger agreement or the merger proposed by Cabot Microelectronics; and (iii) after the four business days, the KMG board of directors must conclude, after consultation with independent financial advisors and outside legal counsel, that even if the revisions committed to in writing by Cabot Microelectronics were to be accepted by KMG, the failure to make a KMG adverse recommendation change would be inconsistent with the fiduciary duties of the KMG board of directors and, in the case of a KMG takeover proposal, that the proposal continues to constitute a KMG superior proposal.

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Conditions to Completion of the Merger (see page 96)

The obligations of each of KMG and Cabot Microelectronics to effect the merger are subject to the satisfaction or waiver of the following conditions:

the approval and adoption of the merger agreement by the holders of at least a majority of the shares of the KMG common stock outstanding on the record date must have been obtained;

the registration statement on Form S-4 of which this prospectus/proxy statement forms a part must have been declared effective by the SEC under the Securities Act and no stop order suspending the effectiveness of the Form S-4 may be in effect and no proceedings for that purpose may be initiated by the SEC;

no court or other governmental entity may have entered or issued an order, writ, injunction, judgment, decree, ruling, directive or award, or adopted or enacted a law, that prohibits, enjoins or makes illegal the consummation of the merger;

the waiting period (or extensions thereof) applicable to the merger under the HSR Act must have expired or been terminated;

shares of Cabot Microelectronics common stock that will be issued in connection with the merger must have been approved for listing on the Nasdaq, subject to official notice of issuance;

the other party must have performed or complied in all material respects with its covenants;

subject to certain exceptions and materiality standards provided in the merger agreement, the representations and warranties of the other party must be true and correct at and as of the closing date as though made at and as of the closing date (except if made as of an earlier date, in which case as of such date);

since the date of the merger agreement, there must not have been any fact, change, circumstance, event, occurrence, condition or development that has had or would reasonably be expected to have, individually or in the aggregate, a material adverse effect (as defined in the merger agreement) on the other party; and

the other party must have delivered to the party a certificate, dated as of the closing date and signed by its chief executive officer or another senior officer, certifying to the effect that the preceding three conditions have been met.

Neither Cabot Microelectronics nor KMG can be certain when, or if, the conditions to the merger will be satisfied or waived, or that the merger will be completed.

Termination of the Merger Agreement (see page 98)

Cabot Microelectronics and KMG may mutually agree to terminate the merger agreement before completing the merger, whether before or after the receipt of KMG shareholder approval of the merger proposal.

Either Cabot Microelectronics or KMG may terminate the merger agreement, whether before or after the receipt of KMG shareholder approval of the merger proposal:

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if the merger has not been consummated by February 14, 2019 (which deadline may be extended, under certain circumstances, to May 14, 2019) (such date, as it may be extended, the "end date");

if a governmental entity of competent jurisdiction has entered or issued a final and nonappealable order or adopted or enacted a law that permanently restrains, enjoins or makes illegal consummation of the merger;

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if the approval of the proposal to approve and adopt the merger agreement by KMG shareholders has not been obtained upon a vote on the approval of the merger proposal at the special meeting (including any postponement or adjournment thereof);
or

if the other party has materially breached any of its representations, warranties, covenants or agreements contained in the merger agreement and such breach (i) would result in the failure of the terminating party's conditions to closing and (ii) is not curable or is not cured by the earlier of the end date and the date that is 30 business days following written notice describing such breach in reasonable detail.

Cabot Microelectronics may also terminate the merger agreement, prior to receipt of approval of the merger proposal by KMG shareholders, if (i) a KMG adverse recommendation change occurs or (ii) KMG is in material and willful breach of its non-solicitation obligations or its obligations to hold the special meeting under the merger agreement and such breach is not curable or is not cured by the earlier of the end date and the date that is 30 business days following written notice describing such breach in reasonable detail.

Expenses and Termination Fees Relating to the Merger (see page 99)

KMG must pay Cabot Microelectronics a termination fee of \$38,765,000 if the merger agreement is terminated in certain circumstances involving an adverse recommendation change, a breach of KMG's non-solicitation obligations or obligations relating to the KMG special meeting under the merger agreement. In addition, in the event that the merger agreement is terminated because (i) the merger is not consummated prior to the End Date, (ii) the KMG shareholder approval has not been obtained at the special meeting of KMG shareholders, or (iii) KMG materially and willfully breaches any of its representations, warranties, covenants or agreements, and in any such case (a) a competing takeover proposal has been publicly announced or disclosed prior to such termination and (b) within 12 months after such termination, KMG enters into a definitive agreement with respect to, or consummates, the announced or disclosed KMG takeover proposal (in each case with references to 25% in the definition of a KMG takeover proposal being replaced by 50% for this purpose) the termination fee is also payable.

All other expenses relating to the merger will generally be paid by the party incurring or required to incur the expense; except that KMG and Cabot Microelectronics will each pay one-half of all filing fees required under the HSR Act and filing fees and printing and mailing costs for this proxy statement/prospectus.

Comparison of Rights of Common Stockholders of Cabot Microelectronics and Common Shareholders of KMG (see page 127)

KMG shareholders receiving shares of Cabot Microelectronics common stock in the merger will have different rights once they become stockholders of Cabot Microelectronics due to differences between the governing corporate documents and corporate state laws applicable to KMG and Cabot Microelectronics.

Risk Factors (see page 22)

You should consider all the information contained in or incorporated by reference into this proxy statement/prospectus in deciding how to vote for the proposals presented in this proxy statement/prospectus.

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SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA OF CABOT MICROELECTRONICS

The following selected historical consolidated financial data of Cabot Microelectronics for each of the fiscal years during the three-year period ended September 30, 2017, and the selected historical consolidated balance sheet data as of September 30, 2017 and 2016 have been derived from Cabot Microelectronics' audited consolidated financial statements as of and for the fiscal year ended September 30, 2017 contained in Cabot Microelectronics' Annual Report on Form 10-K for the fiscal year ended September 30, 2017, which is incorporated by reference into this proxy statement/prospectus. From this same report, the following selected historical consolidated financial data for each of the fiscal years ended September 30, 2014 and 2013 and the selected balance sheet data as of September 30, 2015, 2014 and 2013 have been derived from Cabot Microelectronics' unaudited selected financial summary table.

The following unaudited selected financial data for Cabot Microelectronics as of June 30, 2018, and for the nine months ended June 30, 2018 and 2017, are derived from Cabot Microelectronics' unaudited condensed consolidated financial statements and accompanying notes, which are contained in Cabot Microelectronics' Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, which is incorporated by reference into this proxy statement/prospectus. The following unaudited selected financial data as of June 30, 2017 is derived from Cabot Microelectronics' unaudited condensed consolidated financial statements for the quarter ended June 30, 2017, which have previously been filed with the SEC but which are not incorporated by reference into this proxy statement/prospectus. The unaudited financial data presented have been prepared on a basis consistent with Cabot Microelectronics' audited consolidated financial statements. In the opinion of Cabot Microelectronics' management, such unaudited financial data reflect all adjustments, consisting only of normal and recurring adjustments, necessary for a fair statement of the results for those periods. The results of operations for the interim periods are not necessarily indicative of the results to be expected for the full year or any future period.

The information set forth below is only a summary and is not necessarily indicative of the results of future operations of Cabot Microelectronics, including following completion of the merger, and you should read the following information together with Cabot Microelectronics' consolidated financial statements, the related notes and the sections titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in Cabot Microelectronics' Annual Report on Form 10-K for the fiscal year ended September 30, 2017 and in its Quarterly Reports on Form 10-Q for the quarters ended December 31, 2017, March 31, 2018 and June 30, 2018, which are incorporated by reference into this proxy statement/prospectus, and in Cabot Microelectronics' other reports filed with the SEC. For more information, see the section titled "Where You Can Find More Information" beginning on page 146.

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CABOT MICROELECTRONICS CORPORATION AND SUBSIDIARIES
SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA
(Dollar Amounts in Thousands, Except Per Share Data)

	Nine Months Ended June 30,			Year Ended September 30,			
	2018	2017	2017	2016	2015	2014	2013
Consolidated Statement of							
Income data:							
Revenue	\$ 433,394	\$ 370,395	\$ 507,179	\$ 430,449	\$ 414,097	\$ 424,666	\$ 433,131
Gross profit	229,759	184,079	254,129	210,202	212,231	203,093	212,116
Income before income taxes	116,688	76,659	109,372	70,438	71,197	68,594	74,220
Net income	61,825	60,450	86,952	59,849	56,146	50,751	52,578
Net income per share							
Basic earnings per share (in dollars per share)	2.42	2.42	3.47	2.47	2.32	2.12	2.27
Diluted earnings per share (in dollars per share)	2.35	2.37	3.40	2.43	2.26	2.04	2.19
Dividends per share (in dollars per share)	1.00	0.58	0.78	0.54			
Balance Sheet data:							
Cash and cash equivalents	\$ 186,124	\$ 363,902	\$ 397,890	\$ 287,479	\$ 354,190	\$ 284,155	\$ 226,029
Total assets	\$ 759,482	\$ 801,274	\$ 834,100	\$ 727,230	\$ 660,474	\$ 601,167	\$ 551,592
Long-term debt	\$	\$ 137,309	\$ 132,997	\$ 146,961	\$ 155,313	\$ 164,063	\$ 150,937
Total stockholders' equity	\$ 634,181	\$ 575,022	\$ 595,037	\$ 497,648	\$ 428,964	\$ 372,002	\$ 323,442

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SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA OF KMG

The following selected historical consolidated financial data of KMG for each of the fiscal years during the three-year period ended July 31, 2018, and the selected historical consolidated balance sheet data as of July 31, 2018 and 2017 have been derived from KMG's audited consolidated financial statements as of and for the fiscal year ended July 31, 2018 contained in KMG's Annual Report on Form 10-K for the fiscal year ended July 31, 2018, which is incorporated by reference into this proxy statement/prospectus. The following selected historical consolidated financial data for each of the fiscal years ended July 31, 2015 and 2014 and the selected balance sheet data as of July 31, 2016, 2015 and 2014 have been derived from KMG's audited consolidated financial statements as of and for such years contained in KMG's other reports filed with the SEC, which are not incorporated by reference into this proxy statement/prospectus.

The results of operations of Flowchem Holdings LLC ("Flowchem") have been included in KMG's results of operations for the period subsequent to the completion of the acquisition of Flowchem by KMG on June 15, 2017.

The information set forth below is only a summary and is not necessarily indicative of the results of future operations of KMG, including following completion of the merger, and you should read the following information together with KMG's consolidated financial statements, the related notes and the sections titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in KMG's Annual Report on Form 10-K for the fiscal year ended July 31, 2018, which is incorporated by reference into this proxy statement/prospectus, and in KMG's other reports filed with the SEC. For more information, see the section titled "Where You Can Find More Information" beginning on page 146.

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KMG CHEMICALS, INC.
SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA
(Dollar Amounts in Thousands, Except Per Share Data)

	Year Ended July 31,				
	2018	2017	2016	2015	2014
Income Statement Data:					
Net sales	\$ 465,556	\$ 333,442	\$ 297,978	\$ 320,498	\$ 353,406
Gross profit	197,661	130,138	115,508	109,477	103,499
Income before income taxes	64,399	32,442	28,230	18,884	266
Net income (loss)	\$ 64,841	\$ 23,633	\$ 18,675	\$ 12,138	\$ (988)
Earnings per share					
Basic earnings (loss) per share (in dollars per share)	\$ 4.41	\$ 1.99	\$ 1.59	\$ 1.04	\$ (0.09)
Diluted earnings (loss) per share (in dollars per share)	\$ 4.29	\$ 1.92	\$ 1.57	\$ 1.03	\$ (0.09)
Dividends per share (in dollars per share)	\$ 0.12	\$ 0.12	\$ 0.12	\$ 0.12	\$ 0.12
Balance Sheet data:					
Cash and cash equivalents	\$ 24,436	\$ 20,708	\$ 12,428	\$ 7,517	\$ 19,252
Total assets	\$ 818,434	\$ 792,431	\$ 237,028	\$ 242,359	\$ 250,858
Long-term debt, net	\$ 306,119	\$ 523,102	\$ 35,800	\$ 53,000	\$ 60,000
Total stockholders' equity	\$ 416,067	\$ 173,716	\$ 143,189	\$ 123,421	\$ 120,206

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SUMMARY UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

The following tables present unaudited pro forma condensed combined financial information about Cabot Microelectronics' consolidated balance sheet and statements of income after giving effect to the merger with KMG, financing activities related to the merger and KMG's 2017 acquisition of Flowchem. The information under "Unaudited Pro Forma Condensed Combined Balance Sheet" in the table below gives effect to the merger as if it had taken place on June 30, 2018. The information under "Unaudited Pro Forma Condensed Combined Statement of Income" in the table below gives effect to the merger as if it had taken place on October 1, 2016, and gives effect to KMG's 2017 acquisition of Flowchem as if it had taken place on August 1, 2016. This unaudited pro forma condensed combined financial information was prepared using the acquisition method of accounting where Cabot Microelectronics is considered the acquirer of KMG for accounting purposes. See the section titled "The Merger Accounting Treatment of the Merger" beginning on page 72.

Cabot Microelectronics and KMG have different fiscal years. Cabot Microelectronics' fiscal year ends on September 30, whereas KMG's fiscal year ends on July 31. The unaudited pro forma condensed combined balance sheet and statements of income have been prepared utilizing period ends that differ by less than 93 days, as permitted by Rule 11-02 Regulation S-X.

This unaudited pro forma condensed combined financial information has been prepared for illustrative purposes only and is based on assumptions and estimates considered appropriate by Cabot Microelectronics' management; however, it is not necessarily indicative of what Cabot Microelectronics' consolidated financial condition or results of operations actually would have been assuming the transactions had been consummated as of the dates indicated, nor does it purport to represent Cabot Microelectronics' consolidated financial position or results of operations for future periods. The adjustments included in this unaudited pro forma condensed combined financial information are preliminary and may be revised. This unaudited pro forma condensed combined financial information does not consider any impacts of potential revenue enhancements, anticipated cost savings and expense efficiencies or other synergies that may be achieved in the acquisitions or any strategies that management may consider in order to continue to efficiently manage Cabot Microelectronics' operations. Future results may vary significantly from the results reflected due to various factors, including those discussed in the section titled "Risk Factors" beginning on page 22. The information presented below should be read in conjunction with the historical consolidated financial statements of Cabot Microelectronics and KMG, including the related notes filed by each of them with the SEC, the historical consolidated financial statements and pre-acquisition financial information of Flowchem as filed by KMG with the SEC and the pro forma condensed combined financial information of Cabot Microelectronics, KMG and Flowchem, including the related notes appearing elsewhere in this proxy statement/prospectus. See the sections titled "Where You Can Find More Information" and "Unaudited Pro Forma Condensed Combined Financial Information" beginning on pages 146 and 103, respectively.

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CABOT MICROELECTRONICS CORPORATION
UNAUDITED PRO FORMA CONDENSED COMBINED BALANCE SHEET
AS OF JUNE 30, 2018
(in thousands)

As of June 30, 2018	
Pro Forma Balance Sheet Data:	
Cash and cash equivalents	\$ 131,519
Total assets	2,293,537
Long-term debt, net of current portion	1,034,350
Total stockholders' equity	923,221

CABOT MICROELECTRONICS CORPORATION
UNAUDITED PRO FORMA CONDENSED COMBINED STATEMENT OF INCOME
(in thousands, except per share amounts)

	Nine Months Ended June 30, 2018 for Cabot Microelectronics and July 31, 2018 for KMG	Year Ended September 30, 2017 for Cabot Microelectronics and July 31, 2017 for KMG and the Period from August 1, 2016 to June 14, 2017 for Flowchem
Pro Forma Statement of Income Data:		
Revenue	\$ 788,286	\$ 917,422
Net income	92,240	97,457
Net income per common share:		
Basic	\$ 3.21	\$ 3.44
Diluted	3.12	3.38
Weighted average common shares outstanding:		
Basic	28,718	28,255
Diluted	29,490	28,781

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The following tables set forth historical per share information of Cabot Microelectronics and KMG and unaudited pro forma condensed combined per share information after giving effect to the merger, financing activities related to the merger and KMG's 2017 acquisition of Flowchem. You should not rely on this information as being indicative of the historical results that would have been achieved had the companies always been combined or the future results that Cabot Microelectronics will experience after the merger. The preliminary unaudited pro forma condensed combined per share data has been derived from and should be read in conjunction with the "Unaudited Pro Forma Condensed Combined Financial Information" beginning on page 103 and the related notes included in this proxy statement/prospectus beginning on page 109. The historical per share data has been derived from the historical consolidated financial statements of Cabot Microelectronics and KMG and unaudited pro forma condensed combined financial information about Cabot Microelectronics' combined balance sheet and statements of income after giving effect to the merger with KMG and KMG's 2017 acquisition of Flowchem, in each case and as of and for the periods indicated, included and incorporated by reference in this proxy statement/prospectus. The equivalent basis pro forma combined amounts are calculated by multiplying the pro forma combined data by an exchange ratio of 0.2, which is the share exchange consideration to KMG shareholders in Cabot stock as contemplated in the merger agreement. The equivalent basis pro forma calculations exclude the \$55.65 per share cash portion of the merger consideration.

	Historical Cabot Microelectronics	Historical KMG	Pro Forma Combined	Equivalent Basis Pro Forma Combined
Income per basic share attributable to common shareholders				
Nine months ended June 30, 2018 for Cabot Microelectronics and July 31, 2018 for KMG and Flowchem	\$ 2.42	\$ 3.80	\$ 3.21	\$ 0.64
Twelve months ended September 30, 2017 for Cabot Microelectronics and July 31, 2017 for KMG and Flowchem	\$ 3.47	\$ 1.99	\$ 3.44	\$ 0.69
Income per diluted share attributable to common shareholders				
Nine months ended June 30, 2018 for Cabot Microelectronics and July 31, 2018 for KMG and Flowchem	\$ 2.35	\$ 3.70	\$ 3.12	\$ 0.62
Twelve months ended September 30, 2017 for Cabot Microelectronics and July 31, 2017 for KMG and Flowchem	\$ 3.40	\$ 1.92	\$ 3.38	\$ 0.68
Cash dividends per share				
Nine months ended June 30, 2018 for Cabot Microelectronics and July 31, 2018 for KMG and Flowchem	\$ 1.00	\$ 0.09	N/A(1)	N/A(1)
Twelve months ended September 30, 2017 for Cabot Microelectronics and July 31, 2017 for KMG and Flowchem	\$ 0.78	\$ 0.12	N/A(1)	N/A(1)
Book value per share				
As of June 30, 2018 for Cabot Microelectronics and July 31, 2018 for KMG and Flowchem	\$ 24.83	\$ 26.83	\$ 32.08	\$ 6.42

- (1) Pro forma combined dividends per share is not presented, as the dividend per share for Cabot Microelectronics will be determined by the Cabot Microelectronics Board following completion of the merger.

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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This proxy statement/prospectus and the documents incorporated by reference into this proxy statement/prospectus contain forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 that are not limited to historical facts but reflect Cabot Microelectronics' and KMG's current beliefs, expectations or intentions regarding future events. Words such as "anticipate," "believe," "continue," "could," "estimate," "expect," "forecast," "guidance," "intend," "may," "plan," "possible," "potential," "predict," "project," "pursue," "will," "should," "target," and other similar words, phrases or expressions or the negative thereof are intended to identify such forward-looking statements. These forward-looking statements include, without limitation, Cabot Microelectronics' and KMG's expectations with respect to the potential revenue enhancements, anticipated cost savings and expense efficiencies or other synergies, costs and other anticipated financial impacts of the merger; future financial and operating results of the combined company; the combined company's plans, objectives, expectations and intentions with respect to future operations and services; required adoption of the merger agreement by KMG shareholders; required approvals of the merger by governmental regulatory authorities; the satisfaction of the closing conditions to the merger; and the timing of the completion of the merger.

All forward-looking statements involve significant risks and uncertainties that could cause actual results to differ materially from those expressed or implied in the forward-looking statements, many of which are generally outside the control of Cabot Microelectronics and KMG and difficult to predict. These risks and uncertainties include, among others, those set forth under "Risk Factors" beginning on page 22, as well as risks and uncertainties relating to:

the uncertainty of the value of the merger consideration that KMG shareholders will receive in the merger due to a fixed exchange ratio and a potential fluctuation in the market price of Cabot Microelectronics common stock;

the possibility that the consummation of the merger is delayed or does not occur, including due to the failure of KMG shareholders to approve the merger proposal;

the occurrence of any event, change or other circumstances that could give rise to the termination of the merger agreement or the failure to satisfy the closing conditions;

the taking of governmental action (including the passage of legislation) to block the merger or otherwise adversely affecting Cabot Microelectronics and KMG;

KMG's directors and executive officers having interests in the merger that are different from, or in addition to, the interests of KMG shareholders generally;

the effect of restrictions placed on Cabot Microelectronics', KMG's or their respective subsidiaries' business activities and the limitations put on KMG's ability to pursue alternatives to the merger pursuant to the merger agreement;

the disruption from the merger making it more difficult for Cabot Microelectronics and KMG to maintain relationships with their respective customers, employees or suppliers;

the possibility of actual results of operations, cash flows and financial position after the merger materially differing from the unaudited pro forma condensed combined financial information contained in this proxy statement/prospectus;

the possibility of changes in circumstances between the date of the signing of the merger agreement and the closing of the merger that are not reflected in the fairness opinion obtained by the KMG board of directors;

unexpected costs or unexpected liabilities that may arise from the merger, whether or not consummated;

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the outcome of any legal proceedings that have been or may be instituted against Cabot Microelectronics, KMG or others following announcement of the merger;

the inability of Cabot Microelectronics and KMG to retain key personnel;

the ability of Cabot Microelectronics to successfully integrate the business of KMG;

the possibility that the expected cost savings and synergies from the merger will not be realized or will take longer to realize than expected;

the risk that the financing required to complete the merger is not obtained or is obtained on terms other than those currently anticipated, including financing less favorable to Cabot Microelectronics than its current commitments;

the effect of the additional indebtedness that Cabot Microelectronics will incur in connection with the merger; and

the impact of global economic conditions, fluctuations in exchange rates, labor relations, competitive actions taken by other semiconductor businesses or other competitors, terrorist attacks or natural disasters.

Cabot Microelectronics and KMG caution that the foregoing list of factors is not exhaustive. Additional information concerning these and other risk factors is contained in Cabot Microelectronics' and KMG's most recently filed Annual Reports on Form 10-K and subsequently filed Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other SEC filings, as such filings may be amended from time to time. All of the forward-looking statements made by Cabot Microelectronics or KMG contained or incorporated by reference in this proxy statement/prospectus and all subsequent written and oral forward-looking statements concerning Cabot Microelectronics, KMG, the merger or other matters attributable to Cabot Microelectronics or KMG or any person acting on either of their behalf are expressly qualified in their entirety by the cautionary statement above.

Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date such statements were made. Neither Cabot Microelectronics nor KMG undertakes any obligation to update or revise any of these forward-looking statements to reflect events or circumstances that may arise after the date hereof, even if experience or future changes make it clear that projected results expressed or implied in such statements will not be realized, except as may be required by applicable law. Neither Cabot Microelectronics nor KMG intends to make any update or other revision to these forward-looking statements publicly available, except as may be required by applicable law.

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RISK FACTORS

In addition to the other information included in and incorporated by reference into this proxy statement/prospectus, including the matters addressed in the section titled "Cautionary Statement Regarding Forward-Looking Statements" beginning on page 20, you should carefully consider the following risk factors before deciding whether to vote for the merger proposal and the other proposals described in this proxy statement/prospectus. In addition, you should read and consider the risk factors associated with each of the businesses of Cabot Microelectronics and KMG because these risk factors will relate to the combined company following the completion of the merger. These risk factors may be found in Cabot Microelectronics' Annual Report on Form 10-K for the fiscal year ended September 30, 2017 and KMG's Annual Report on Form 10-K for the fiscal year ended July 31, 2017 and, in each case, any amendments thereto, as such risk factors may be updated or supplemented in each company's subsequently filed Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, which are incorporated by reference into this proxy statement/prospectus. You should also consider the other information in this proxy statement/prospectus and the other documents incorporated by reference into this proxy statement/prospectus. See the section titled "Where You Can Find More Information" beginning on page 146.

Risks Relating to the Merger

Because the exchange ratio is fixed for the stock portion of the merger consideration and the market price of Cabot Microelectronics common stock has fluctuated and will continue to fluctuate, you cannot be sure of the value of the merger consideration you will receive.

Upon completion of the merger, shares of KMG common stock will be converted into the right to receive \$55.65 in cash, plus 0.2000 shares of Cabot Microelectronics common stock, in each case, without interest and less any applicable withholding taxes. Based on the closing price of Cabot Microelectronics common stock on August 14, 2018, the last full trading day before the public announcement of the merger, the per share value of KMG common stock implied by the per share merger consideration is \$79.93. Based on the closing price of Cabot Microelectronics common stock on October 4, 2018, the most recent practicable date prior to the date of this proxy statement/prospectus, the per share value of KMG common stock implied by the per share merger consideration is \$76.06. The implied value of the per share merger consideration will fluctuate as the market price of Cabot Microelectronics common stock fluctuates because a portion of the per share merger consideration is payable in a fixed number of shares of Cabot Microelectronics common stock. The value of the stock portion of the merger consideration has fluctuated since the date of the announcement of the merger agreement and will continue to fluctuate from the date of this proxy statement/prospectus to the date of the special meeting and the date the merger is completed and thereafter. Accordingly, at the time of the special meeting, KMG shareholders will not know or be able to determine the market value of the merger consideration they would receive upon completion of the merger. Stock price changes may result from a variety of factors, including, among others, general market and economic conditions, changes in Cabot Microelectronics' and KMG's respective businesses, operations and prospects, market assessments of the likelihood that the merger will be completed, the timing of the merger, regulatory considerations and other risk factors set forth or incorporated by reference in this proxy statement/prospectus. Many of these factors are beyond Cabot Microelectronics' and KMG's control. You are urged to obtain current market quotations for Cabot Microelectronics common stock before deciding whether to vote for the merger proposal.

Completion of the merger is subject to the conditions contained in the merger agreement and if these conditions are not satisfied or waived, the merger will not be completed.

The obligations of Cabot Microelectronics and KMG to complete the merger are subject to the satisfaction or waiver of a number of conditions, including, among others, the approval of the merger proposal by KMG shareholders. For a more complete summary of the required regulatory approvals

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and the conditions to the closing of the merger, see the section titled "The Merger Agreement Conditions to Completion of the Merger."

Many of the conditions to the closing of the merger are not within Cabot Microelectronics' or KMG's control, and neither company can predict when or if these conditions will be satisfied. If any of these conditions are not satisfied or waived prior to February 14, 2019, which deadline may be extended, under certain circumstances, to May 14, 2019, it is possible that the merger agreement will be terminated. The failure to satisfy all of the required conditions could delay the completion of the merger for a significant period of time or prevent it from occurring. Any delay in completing the merger could cause Cabot Microelectronics not to realize some or all of the benefits that Cabot Microelectronics expects to achieve if the merger is successfully completed within its expected timeframe. There can be no assurance that the conditions to the closing of the merger will be satisfied or waived or that the merger will be completed.

KMG's directors and executive officers have interests in the merger that may be different from, or in addition to, your interests as a shareholder of KMG generally.

When considering the recommendation of the KMG board of directors that KMG shareholders approve the merger proposal, KMG shareholders should be aware that directors and executive officers of KMG have certain interests in the merger that may be different from, or in addition to, the interests of KMG shareholders generally. These interests generally include, among others, rights to accelerated vesting of equity awards and certain payments (including retention bonus awards) and benefits in connection with the merger and/or a qualifying termination of employment following the merger. See the section titled "The Merger Interests of KMG's Directors and Executive Officers in the Merger" beginning on page 69 for a more detailed description of these interests. As a result of these interests, directors and executive officers of KMG might be more likely to support and vote in favor of the merger proposal than if they did not have these interests. KMG's board of directors were aware of these interests and considered them, among other things, in evaluating and negotiating the merger agreement and the merger, and in recommending that the KMG shareholders approve and adopt the merger agreement.

The merger agreement limits KMG's ability to pursue alternatives to the merger and may discourage other companies from trying to acquire KMG.

The merger agreement contains provisions that make it more difficult for KMG to sell its business to a party other than Cabot Microelectronics. These provisions include a general prohibition on KMG soliciting any company takeover proposal or offer for a competing transaction. Further, there are only limited exceptions to KMG's agreement that the KMG board of directors will not withdraw or modify the recommendation of the KMG board of directors that KMG shareholders vote in favor of the merger proposal, and KMG is not permitted to terminate the merger agreement or enter into an agreement with respect to a competing company takeover proposal if the KMG board of directors withdraws or modifies such recommendation. In addition, upon termination of the merger agreement, KMG is required to pay Cabot Microelectronics a termination fee of \$38,765,000 if the merger agreement is terminated in certain circumstances involving an adverse recommendation change or a willful and material breach of KMG's non-solicitation obligations or certain obligations relating to the KMG special meeting under the merger agreement.

These provisions could discourage a third party that might have an interest in acquiring all or a significant part of KMG from considering or proposing that acquisition, even if that party were prepared to pay consideration with a higher per share value than the value proposed to be received or realized in the merger. These provisions might also result in a potential competing acquirer proposing to pay a lower price than it might otherwise have proposed to pay because of the added expense of the termination fee that may become payable in certain circumstances.

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The merger agreement subjects KMG to restrictions on its business activities.

The merger agreement subjects KMG to restrictions on its business activities and obligates KMG to generally operate its businesses in all material respects in the ordinary course. These restrictions could have an adverse effect on KMG's results of operations, cash flows and financial position. See the section titled "The Merger Agreement Conduct of Businesses of KMG and Cabot Microelectronics Prior to Completion of the Merger" beginning on page 87 for a description of the restrictions applicable to KMG.

The business relationships of Cabot Microelectronics and KMG and their respective subsidiaries may be subject to disruption due to uncertainty associated with the merger, which could have an adverse effect on the results of operations, cash flows and financial position of Cabot Microelectronics, KMG and, following the completion of the merger, the combined company.

Parties with which Cabot Microelectronics and KMG, or their respective subsidiaries, do business may be uncertain as to the effects on them of the merger and related transactions, including with respect to current or future business relationships with Cabot Microelectronics, KMG, their respective subsidiaries or the combined company. These relationships may be subject to disruption as customers, suppliers and other persons with whom Cabot Microelectronics and KMG have a business relationship may delay or defer certain business decisions or might decide to terminate, change or renegotiate their relationships with Cabot Microelectronics or KMG, as applicable, or consider entering into business relationships with parties other than Cabot Microelectronics, KMG, their respective subsidiaries or the combined company. These disruptions could have an adverse effect on the results of operations, cash flows and financial position of KMG, Cabot Microelectronics or the combined company following the completion of the merger, including an adverse effect on Cabot Microelectronics' ability to realize the expected synergies and other benefits of the merger. The risk, and adverse effect, of any disruption could be exacerbated by a delay in completion of the merger or termination of the merger agreement.

Failure to complete the merger could negatively affect the stock price and the future business and financial results of KMG.

If the merger is not completed for any reason, including as a result of KMG shareholders failing to approve the merger proposal, the ongoing business of KMG may be adversely affected and, without realizing any of the benefits of having completed the merger, KMG could be subject to a number of negative consequences, including, among others, the following:

KMG may experience negative reactions from the financial markets, including negative impacts on its stock price;

KMG may experience negative reactions from its customers and suppliers;

KMG may experience negative reactions from its employees and may not be able to retain key management personnel and other key employees;

KMG will have incurred, and will continue to incur, significant non-recurring costs in connection with the merger that it may be unable to recover;

the merger agreement places certain restrictions on the conduct of KMG's business prior to completion of the merger, the waiver of which is subject to the consent of Cabot Microelectronics, which may prevent KMG from making certain acquisitions, taking certain other specified actions or otherwise pursuing business opportunities during the pendency of the merger that may be beneficial to KMG (see the section titled "The Merger Agreement Conduct of Businesses of KMG and Cabot Microelectronics Prior to Completion of the Merger" beginning on page 87 for a description of the restrictions applicable to KMG); and

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matters relating to the merger (including integration planning) will require substantial commitments of time and resources by KMG management, which could otherwise be devoted to day-to-day operations and other opportunities that may be beneficial to KMG as an independent company.

In addition, upon termination of the merger agreement, KMG is required to pay Cabot Microelectronics a termination fee of \$38,765,000 if the merger agreement is terminated in certain circumstances involving an adverse recommendation change, a breach of KMG's non-solicitation obligations or certain obligations relating to the special meeting under the merger agreement. Finally, KMG could be subject to litigation related to any failure to complete the merger or related to any enforcement proceeding commenced against KMG to perform its obligations under the merger agreement. If the merger is not completed, any of these risks may materialize and may adversely affect KMG's businesses, financial condition, financial results and stock price.

Completion of the merger will trigger change in control or other provisions in certain agreements to which KMG is a party, which may have an adverse impact on the combined company's business and results of operations.

The completion of the merger will trigger change in control and other provisions in certain agreements to which KMG is a party. If KMG and Cabot Microelectronics are unable to negotiate waivers of those provisions, the counterparties may exercise their rights and remedies under the agreements, potentially terminating the agreements or seeking monetary damages. Even if KMG and Cabot Microelectronics are able to negotiate waivers, the counterparties may require a fee for such waivers or seek to renegotiate the agreements on terms less favorable to KMG or the combined company. Any of the foregoing or similar developments may have an adverse impact on the combined company's business and results of operations. See section titled "The Merger Interests of KMG's Directors and Executive Officers in the Merger."

The shares of Cabot Microelectronics common stock to be received by KMG shareholders as a result of the merger will have rights different from the shares of KMG common stock.

Upon completion of the merger, KMG shareholders will no longer be shareholders of KMG but will instead receive cash and Cabot Microelectronics common stock and become Cabot Microelectronics stockholders, and their rights as stockholders will be governed by the terms of the Cabot Microelectronics charter and bylaws and by the Delaware General Corporation Law (the "DGCL"). See the section titled "Comparison of Rights of Common Stockholders of Cabot Microelectronics and Common Shareholders of KMG" beginning on page 127 for a discussion of the different rights associated with Cabot Microelectronics common stock.

The unaudited pro forma condensed combined financial information included in this proxy statement/prospectus is preliminary and the actual financial condition and results of operations after the merger may differ materially from them.

The unaudited pro forma condensed combined financial information included in this proxy statement/prospectus is presented for illustrative purposes only and is not necessarily indicative of what Cabot Microelectronics' actual financial condition or results of operations would have been had the merger been completed on the dates indicated. The unaudited pro forma condensed combined financial information reflects adjustments, which are based upon assumptions, preliminary estimates and accounting reclassifications, to record the KMG identifiable assets acquired and liabilities assumed at fair value and the resulting goodwill recognized. The purchase price allocation reflected in this proxy statement/prospectus is preliminary, and final allocation of the purchase price will be based upon the actual purchase price and the fair value of the assets and liabilities of KMG as of the date of the completion of the merger. Accordingly, the final acquisition accounting adjustments may differ

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materially from the pro forma adjustments reflected in this proxy statement/prospectus. For more information, see "Unaudited Pro Forma Condensed Combined Financial Information" beginning on page 103.

The prospective financial information for Cabot Microelectronics and KMG is based on various assumptions that may not prove to be correct.

The unaudited prospective financial information of Cabot Microelectronics and KMG set forth in the section entitled "The Merger Certain Unaudited Prospective Financial Information" was not prepared with a view toward public disclosure or with a view toward complying with the guidelines established by the American Institute of Certified Public Accountants with respect to prospective financial information. In the view of KMG's management, the prospective information was prepared on a reasonable basis, reflected the best currently available estimates and judgments of Cabot Microelectronics and KMG, as applicable, and presented, to the best of their knowledge and belief, the expected course of action and the expected future financial performance of Cabot Microelectronics and KMG. However, the prospective information is not fact. Further, prospective financial information does not reflect any impact of the proposed transaction and has not been updated since the date of preparation.

The prospective financial information was prepared and provided by KMG's management, Cabot Microelectronics' management and/or KBCM as described in such section. The independent registered public accounting firms of Cabot Microelectronics and KMG have not audited, reviewed, examined, compiled nor applied agreed upon procedures with respect to the accompanying prospective financial information and accordingly, the independent registered public accounting firms of Cabot Microelectronics and KMG do not express an opinion or any other form of assurance with respect thereto. The unaudited prospective financial information was prepared solely for internal use to assist in the evaluation of the business combination. Such information is inherently subjective in nature, though considered reasonable by the management of KMG as of the date such information was prepared, and is susceptible to interpretation and, accordingly, contemplated results may not be achieved. While presented with numerical specificity, the unaudited prospective financial information reflects numerous estimates and assumptions with respect to future industry performance under various industry scenarios as well as assumptions for competition, general business, economic, market and financial conditions and matters specific to the businesses of Cabot Microelectronics and KMG, all of which are difficult to predict and many of which are beyond Cabot Microelectronics' and KMG's control. Accordingly, there can be no assurance that the assumptions made in preparing any particular information will prove accurate. There will be differences between actual and prospective results, and the differences may be material. The risk that these uncertainties and contingencies could cause the assumptions to fail to be reflective of actual results is further increased due to the length of time over which these assumptions apply. In light of the foregoing factors and the uncertainties inherent in the unaudited prospective financial information, KMG shareholders are cautioned not to place undue reliance on the unaudited prospective financial information, and the inclusion of the unaudited prospective financial information in this proxy statement should not be regarded as a representation by any person that the results contained therein will be achieved.

The fairness opinion obtained by the KMG board of directors from KBCM does not reflect changes, circumstances, developments or events that may have occurred or may occur after the date of the fairness opinion. The KMG board of directors has not obtained an updated fairness opinion as of the date of this proxy statement/prospectus from KBCM, and the KMG board of directors does not expect to receive an updated fairness opinion prior to the closing of the merger.

At the meeting of the KMG board of directors on August 14, 2018, KBCM rendered its oral opinion, subsequently confirmed in writing, that as of such date, and based upon and subject to the

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various assumptions, considerations, qualifications and limitations set forth in its written opinion, the consideration of \$55.65 in cash and 0.2000 shares of Cabot Microelectronics common stock, in each case, without interest and less any applicable withholding taxes, per share of KMG common stock to be received pursuant to, and in accordance with, the terms of the merger agreement by the holders of KMG common stock, other than (i) Cabot Microelectronics and Merger Sub and (ii) shareholders that have complied with the applicable provisions of Chapter 10, Subchapter H of the TBOC, was fair, from a financial point of view, to such holders. KBCM's fairness opinion does not reflect changes, circumstances, developments or events that may have occurred or may occur after the date of its opinion, including changes in the operations and prospects of KMG and Cabot Microelectronics or their respective operating companies, regulatory or legal changes, general market and economic conditions and other factors that may be beyond the control of KMG and Cabot Microelectronics, and on which KBCM's opinion was based, and that may alter the value of KMG or Cabot Microelectronics or the prices of shares of KMG or Cabot Microelectronics common stock by the time the merger is completed. The value of the stock portion of the merger consideration has fluctuated since, and could be materially different from its value as of, the date of KBCM's opinion, and KBCM's opinion does not address the prices at which shares of KMG common stock or Cabot Microelectronics common stock may have traded or trade since the date of its opinion. KBCM's opinion does not speak as of the time the merger will be completed or as of any date other than the date of its opinion. KMG does not anticipate asking KBCM to update its opinion, and KBCM does not have any obligation or responsibility to update, revise or reaffirm its opinion based on circumstances, developments or events that may have occurred or may occur after the date of its opinion. The fairness opinion that KMG received from its financial advisor is attached as **Annex C** to this proxy statement/prospectus. For a description of the opinion, see "The Merger Opinion of KeyBanc Capital Markets Inc (KBCM)." For a description of the other factors considered by KMG's board of directors in determining to approve the merger, see "The Merger KMG's Reasons for the Merger; Recommendation of the KMG Board of Directors."

The merger may not be accretive, and may be dilutive, to Cabot Microelectronics earnings per share, which may negatively affect the market price of Cabot Microelectronics common stock.

Because shares of Cabot Microelectronics common stock will be issued in the merger, it is possible that the merger will be dilutive to Cabot Microelectronics earnings per share, which could negatively affect the market price of shares of Cabot Microelectronics common stock. Based on the number of outstanding shares of KMG common stock as of October 4, 2018, Cabot Microelectronics would issue approximately 3,110,696 shares of Cabot Microelectronics common stock in the merger. The issuance of these new shares of Cabot Microelectronics common stock could have the effect of depressing the market price of shares of Cabot Microelectronics common stock, through dilution of earnings per share or otherwise.

In addition, future events and conditions could decrease accretion or increase dilution relative to current expectations including adverse changes in market conditions, additional transaction and integration related costs and other factors such as the failure to realize some or all of the benefits anticipated in the merger. Any dilution of, or delay of any accretion to, Cabot Microelectronics' earnings per share could cause the price of shares of Cabot Microelectronics common stock to decline or grow at a reduced rate.

The merger will involve substantial costs.

KMG and Cabot Microelectronics have incurred, and expect to continue to incur, a number of non-recurring costs associated with the merger and combining the operations of the two companies. The substantial majority of non-recurring expenses will be comprised of transaction and regulatory costs related to the merger.

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Cabot Microelectronics and the combined company also will incur transaction fees and costs related to formulating and implementing integration plans, including facilities and systems consolidation costs and employment-related costs. Cabot Microelectronics continues to assess the magnitude of these costs, and additional unanticipated costs may be incurred in the merger and the integration of the two companies' businesses. Although Cabot Microelectronics expects that the elimination of duplicative costs, as well as the realization of other efficiencies related to the integration of the businesses, should allow Cabot Microelectronics to offset integration-related costs over time, this net benefit may not be achieved in the near term, or at all.

Lawsuits may in the future be filed against KMG, its directors, Cabot Microelectronics and Merger Sub challenging the merger, and an adverse ruling in any such lawsuit may prevent the merger from becoming effective or from becoming effective within the expected timeframe.

Transactions like the merger are frequently the subject of litigation or other legal proceedings, including actions alleging that the board of directors of either KMG or Cabot Microelectronics breached their respective fiduciary duties to their stockholders by entering into the merger agreement, by failing to obtain a greater value in the transaction for their stockholders or otherwise. Both KMG and Cabot Microelectronics believe that any such litigation or proceedings would be without merit, but there can be no assurance that they will not be brought. If litigation or other legal proceedings are in fact brought against either KMG or Cabot Microelectronics or against the board of directors of either company, they will defend against it, but they might not be successful in doing so. An adverse outcome in such matters, as well as the costs and efforts of a defense even if successful, could have a material adverse effect on the business, results of operation or financial position of KMG, Cabot Microelectronics or the combined company, including through the possible diversion of either company's resources or distraction of key personnel.

Further, one of the conditions to the completion of the merger is that no injunction by any court or other tribunal of competent jurisdiction will be in effect that temporarily or permanently prohibits, enjoins or makes illegal the consummation of the merger. As such, if any of the plaintiffs are successful in obtaining an injunction prohibiting the consummation of the merger, that injunction may prevent the merger from becoming effective or from becoming effective within the expected timeframe.

Uncertainties associated with the merger may cause a loss of management personnel and other key employees of KMG or Cabot Microelectronics, which could adversely affect the future business and operations of the combined company following the merger.

KMG and Cabot Microelectronics are dependent on the experience and industry knowledge of their officers and other key employees to execute their business plans. The combined company's