

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

DIVISION OF CORPORATION FINANCE

March 28, 2013

<u>Via E-mail</u> Eduardo E. Cordeiro Executive Vice President and Chief Financial Officer Cabot Corporation Two Seaport Lane Boston, MA 02210-2019

> Re: Cabot Corporation Form 10-K for the Year Ended September 30, 2012 Filed November 29, 2012 File No. 1-5667

Dear Mr. Cordeiro:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filing and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Rufus Decker

Rufus Decker Accounting Branch Chief