



DIVISION OF
CORPORATION FINANCE

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

February 2, 2012

Via E-mail

Mr. John E. Fischer
Chief Financial Officer
Olin Corporation
190 Carondelet Plaza, Suite 1530
Clayton, MO 63105

**RE: Olin Corporation
Form 10-K for the Year Ended December 31, 2010
Filed February 24, 2011
Form 10-Q for the Period Ended September 30, 2011
Filed October 28, 2011
File No. 1-1070**

Dear Mr. Fischer:

We have reviewed your response letter dated January 13, 2012 and have the following comment. In our comment, we have asked you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to this comment, we may have additional comments.

Form 10-Q for the Period Ended September 30, 2011

Financial Statements

Acquisition, page 6

1. We note your response to comment one from our letter dated December 21, 2011. Please provide the following:
 - You indicate that the benefits of control derived by an acquirer can be categorized as (i) potential synergies that result from combining the acquirer's assets with the acquiree's assets and (ii) the acquirer's ability to influence the acquiree's operational, financial, or corporate governance characteristics. You have addressed your ability to

influence Sunbelt's operational, financial and corporate governance characteristics. However, it is not clear from your response how you considered the potential synergies that result from your acquisition. With reference to the buyer specific synergies you discuss in Response 1, Fifth Bullet Point as well as any other potential synergies, please address why you did not identify these synergies as an indication of a benefit of control; and

- In Response 1, Fifth Bullet Point, you have provided a discussion of the nature of the cost savings available from operating the business under a single owner. We have the following comments in this regard:
 - Please provide us with a detailed discussion of the specific operational efficiencies in logistics, purchasing and manufacturing and the potential cost savings from these operational efficiencies. Please explain the difference in these operational efficiencies both before and after the acquisition of the remaining 50% interest in Sunbelt in February 2011. It is not clear how your operations would be different now that you own 100% of Sunbelt. Please clarify.
 - With reference to your examples of the operational and managerial authority you had over Sunbelt pursuant to the terms of the partnership agreement between Olin and PolyOne, please address why you were unable to fully utilize Sunbelt's low cost membrane capacity prior to your acquisition of PolyOne's 50% interest in Sunbelt.

You may contact Ernest Greene, Staff Accountant at (202) 551-3733 or Jeanne Baker, Assistant Chief Accountant at (202) 551-3691 if you have questions regarding these comments.

Sincerely,

/s/ Rufus Decker

Rufus Decker
Accounting Branch Chief