

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

## SCHEDULE 13G

Under the Securities exchange Act of 1934

(Amendment No. 0)\*

POLYONE CORP

-----  
(NAME OF ISSUER)

COM NEW

-----  
(TITLE OF CLASS OF SECURITIES)

73179P106

-----  
(CUSIP NUMBER)

December 31, 2011

-----  
(Date of event which requires filing of this Statement)

Check the appropriate box to designate the rule pursuant to which  
this Schedule is filed:

- X Rule 13d-1(b)  
Rule 13d-1(c)  
Rule 13d-1(d)

\* The remainder of this cover page shall be filled out for a reporting  
person's initial filing on this form with respect to the subject class  
of securities, and for any subsequent amendment containing information  
which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not  
be deemed to be 'filed' for the purpose of Section 18 of the Securities  
Exchange Act of 1934 ('Act') or otherwise subject to the liabilities  
of that section of the Act but shall be subject to all other provisions  
of the Act (however, see the Notes).

(CONTINUED ON FOLLOWING PAGE(S))

CUSIP NO. 73179P106

13G

Page 2 of 5 Pages

## 1. NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

AllianceBernstein LP

13-3434400

## 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP \*

(A) [ ]

(B) [X]

## 3. SEC USE ONLY

## 4. CITIZENSHIP OR PLACE OF ORGANIZATION

State of Delaware

NUMBER OF SHARES  
BENEFICIALLYOWNED AS OF  
December 31, 2011BY EACH  
REPORTING

PERSON WITH:

## 5. SOLE VOTING POWER

4,785,790

## 6. SHARED VOTING POWER

0

## 7. SOLE DISPOSITIVE POWER

5,535,560

## 8. SHARED DISPOSITIVE POWER

71,720

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH  
REPORTING PERSON

5,607,280

(Not to be construed as an admission of beneficial ownership)

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN  
SHARES \*

[X]

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

6.2%

12. TYPE OF REPORTING PERSON \*  
IA

\* SEE INSTRUCTIONS BEFORE FILLING OUT!

Item 1(a) Name of Issuer:  
POLYONE CORP

Item 1(b) Address of Issuer's Principal Executive Offices:  
33587 Walker Road  
Avon Lake, OH 44012-

Item 2(a) and (b)  
Name of Person Filing and Address of Principal Business Office:  
  
AllianceBernstein L.P  
1345 Avenue of the Americas  
NewYork, N.Y. 10105

(All media outlets, please contact John Meyers at AllianceBernstein  
(212-969-2301) with any questions. All other questions can be directed to  
Jerry Celentano at Jerry.Celentano@AllianceBernstein.com )

Item 2(c) Citizenship:  
Delaware

Item 2(d) Title of Class of Securities: COM NEW

Item 2(e) Cusip Number: 73179P106

Item 3. Type of Reporting Person: Registered Investment Advisor

## Item 4. Ownership as of 12/31/2011

- (a) Amount Beneficially Owned: 5,607,280 shares of common stock acquired solely for investment purposes on behalf of client discretionary investment advisory accounts\*
- (b) Percent of Class: 6.2%
- (c) Deemed Voting Power and Disposition Power:

	(i) Deemed to have Sole Power to Vote or to Direct the Vote -----	(ii) Deemed to have Shared Power to Vote or to Direct the Vote -----	(iii) Deemed to have Sole Power to Dispose or to Direct the Disposition -----	(iv) Deemed to have Shared Power to Dispose or to Direct the Disposition -----
AllianceBernstein	4,785,790	0	5,535,560	71,720

\*AllianceBernstein L.P. is a majority owned subsidiary of AXA Financial, Inc. and an indirect majority owned subsidiary of AXA SA. AllianceBernstein operates under independent management and makes independent decisions from AXA and AXA Financial and their respective subsidiaries and AXA and AXA Financial calculate and report beneficial ownership separately from AllianceBernstein pursuant to guidance provided by the Securities and Exchange Commission in Release Number 34-39538 (January 12, 1998).

AllianceBernstein may be deemed to share beneficial ownership with AXA reporting persons by virtue of 71,720 shares of common stock acquired on behalf of the general and special accounts of the affiliated entities for which AllianceBernstein serves as a subadvisor. Each of AllianceBernstein and the AXA entities reporting herein acquired their shares of common stock for investment purposes in the ordinary course of their investment management and insurance businesses.

Item 5. Ownership of Five Percent or Less of a Class:

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following.

☐

Item 6. Ownership of More than Five Percent on behalf of Another Person. N/A

Item 7. Identification and Classification of the Subsidiary which Acquired the Security Being Reporting on by the Parent Holding Company: N/A

Item 8. Identification and Classification of Members of the Group. N/A

Item 9. Notice of Dissolution of Group: N/A

Item 10. Certification:

By signing below I certify that to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purposes or effect.

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 14, 2012, ALLIANCEBERNSTEIN L.P.

/s/ Laurence Bertan

Name: Laurence Bertan  
Title: SVP and Head of Regulatory Reporting