

**VERSUM MATERIALS, INC.
8555 SOUTH RIVER PARKWAY
TEMPE, ARIZONA 85284**

**SECOND SUPPLEMENT TO PROXY STATEMENT FOR
ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON JANUARY 30, 2018**

This Second Supplement to Proxy Statement (“Second Supplement”) relates to the Proxy Statement of Versum Materials, Inc. that was first distributed or made available to stockholders on or about December 21, 2017 (together with the Supplement to Proxy Statement filed on January 10 (“First Supplement”), the “Proxy Statement”). The purpose of this Second Supplement is to correct information relating to Proposal Four: Approval of Amended and Restated Long-Term Incentive Plan (“Amended LTIP”).

In describing the Amended LTIP, Proposal Four incorrectly states that “[t]he maximum number of shares with respect to which ‘other stock-based awards’ and ‘performance-based awards,’ collectively, may be granted to any individual participant in the Amended LTIP, other than a non-employee director, in any calendar year may not exceed 375,000.” As stated in the Proxy Statement, the description of the Amended LTIP is qualified by reference to the full text of the Amended LTIP, which is attached as Appendix A to the Proxy Statement. The Amended LTIP in Appendix A states that the 375,000 share limit only applies to “performance-based awards” (as defined under the Amended LTIP).

Accordingly, the Proxy Statement is hereby amended and supplemented as follows: On page 17 of the Proxy Statement, the second sentence of the third paragraph is hereby deleted and replaced with “The maximum number of shares with respect to which ‘performance-based awards’ may be granted to any individual participant in the Amended LTIP in any calendar year, other than to a non-employee director, may not exceed 375,000.” As the “Tax Cuts and Jobs Act” eliminated, subject to certain transition relief, the performance-based compensation exception formerly available under Section 162(m) of the Code, future grants of “performance-based awards” (as defined under the Amended LTIP) may be limited or precluded.

The description of the Amended LTIP is not complete and is qualified by reference to the full text of the Amended LTIP, which is attached as Appendix A to the Proxy Statement.

There are no revisions to the Proxy Statement other than as described above. **The Board of Directors recommends that stockholders vote “for” Proposal Four.**

If you have already voted and do not wish to change your vote, you do not need to do anything. Your vote will be tabulated as you previously instructed. You may change your vote and revoke your proxy by (i) voting again by Internet or telephone at a later time before the closing of those voting facilities at 11:59 p.m., Eastern Time, on January 29, 2018; (ii) submitting a properly signed proxy card with a later date that is received no later than January 29, 2018; (iii) sending a written statement to that effect to our Secretary at Versum Materials, Inc., 8555 South River Parkway, Tempe, Arizona 85284, provided such statement is received no later than January 29, 2018; or (iv) attending the annual meeting, revoking your proxy and voting in person.

January 17, 2018

Important Notice Regarding the Availability of Proxy Materials for the Stockholder Meeting to Be Held on January 30, 2018:

This Second Supplement, the First Supplement, the Proxy Statement and our 2017 annual report, which includes our Annual Report on Form 10-K for the fiscal year ended September 30, 2017, are available free of charge on the Investors section of our website (www.versummaterials.com). In addition, you may access these documents free of charge at www.proxyvote.com.