

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

January 10, 2025

Elizabeth Gonzalez-Sussman Partner Air Products & Chemicals, Inc. Skadden, Arps, Meagher & Flom LLP One Manhattan West New York, New York 10001

> Re: Air Products & Chemicals, Inc. DEFA14A filed January 7, 2025 SEC File No. 1-04534

Dear Elizabeth Gonzalez-Sussman:

We have reviewed your filing and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this comment by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this comment, we may have additional comments.

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1. We note the statement that you have "industry leading margins" based on Adjusted EBITDA margin. Please tell us how this disclosure complies with Item 10(e) of Regulation S-K and Question 102.10(a) of the Compliance & Disclosure Interpretations regarding Non-GAAP Financial Measures. Please also tell us how you considered Item 10(e) of Regulation S-K with regards to your disclosure of Adjusted EPS CAGR.

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We remind you that the filing persons are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff. Please direct any questions to Christina Chalk at 202-551-3263.

Sincerely,

Division of Corporation Finance Office of Mergers & Acquisitions