

Henderson and are registered investment advisers furnishing investment advice to Managed Portfolios.

Item 8. Identification and Classification of Members of the Group

Not applicable.

Item 9. Notice of Dissolution of Group

Not applicable.

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.

SIGNATURES

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.

JANUS HENDERSON GROUP PLC

By /s/ Kristin Mariani
Kristin Mariani, Head of North America Compliance, CCO
Date 2/10/2022

Name/Title Attorney-In-Fact

The original statement shall be signed by each person on whose behalf the statement is filed or his or her authorized representative. If the statement is signed on behalf of a person by his or her authorized representative other than an executive officer or general partner of the filing person, evidence of the representative's authority to sign on behalf of such person shall be filed with the statement (see Exhibit A), provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his or her signature.

EXHIBIT A

POWER OF ATTORNEY

The undersigned, Janus Henderson Group plc ("the Company"), does hereby make, constitute and appoint each of Kristin Mariani and Caroline Barotti acting severally, as its true and lawful attorneys-in-fact, for the purpose of, from time to time, executing in its name and on its behalf, whether the Company individually or as representative of others, any and all documents, certificates, instruments, statements, other filings and amendments to the foregoing (collectively, "documents") determined by such person to be necessary or appropriate to comply with ownership or control-person reporting requirements imposed by any United States or non-United States governmental or regulatory authority, including, without limitation, Forms 13D, 13F, 13G and 13H and any amendments to any of the foregoing as may be required to be filed with the Securities and Exchange Commission, and delivering, furnishing or filing any such documents with the appropriate governmental, regulatory authority or other person, and giving and granting to each such attorney-in-fact power and authority to act in the premises as fully and to all intents and purposes as the Company might or could do if personally present by one of its authorized signatories, hereby ratifying and confirming all that said attorney-in-fact shall lawfully do or cause to be done by virtue hereof. Any such determination by an attorney-in-fact named herein shall be conclusively evidenced by such person's execution, delivery, furnishing or filing of the applicable document.

This power of attorney shall be valid from the date hereof and shall remain in full force and effect until either revoked in writing by the Company, or, in respect of any attorney-in-fact named herein, until such person ceases to be an employee of the Company or one of its affiliates.

