

The information in this preliminary prospectus supplement is not complete and may be changed. A registration statement relating to the securities has become effective under the Securities Act of 1933, as amended. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities, and we are not soliciting an offer to buy these securities, in any jurisdiction where the offer or sale is not permitted.

Subject to completion, dated April 26, 2021

Prospectus Supplement to Prospectus dated April 26, 2021

12,500,000 Shares



PQ Group Holdings Inc.

Common Stock

The selling stockholders named in this prospectus supplement are offering 12,500,000 shares of our common stock. We will not receive any proceeds from the sale of our common stock by the selling stockholders.

Our common stock is listed on the New York Stock Exchange under the symbol "PQG." On April 23, 2021, the last sale price of our common stock as reported on the New York Stock Exchange was \$16.66 per share.

Investing in our common stock involves substantial risk. Please read "[Risk Factors](#)" beginning on page S-8.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

	Per share	Total
Public offering price	\$	\$
Underwriting discounts and commissions (1)	\$	\$
Proceeds to selling stockholders, before expenses	\$	\$

(1) We have agreed to reimburse the underwriters for certain expenses in connection with this offering. See "Underwriting."

The selling stockholders have granted the underwriters an option for a period of up to 30 days from the date of this prospectus supplement to purchase up to an additional 1,875,000 shares of our common stock at the public offering price less the underwriting discount.

The underwriters expect to deliver the shares against payment in New York, New York on or about May , 2021.

Citigroup

BMO Capital Markets

Deutsche Bank Securities

Morgan Stanley

Jefferies

C.L. King & Associates

Prospectus supplement dated , 2021

Credit Suisse

KeyBanc Capital Markets

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Prospectus

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We have not authorized anyone to provide any information or to make any representations other than those contained in or incorporated by reference into this prospectus supplement, the accompanying prospectus or in any free writing prospectuses we have prepared. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus supplement and the accompanying prospectus are an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus supplement and the accompanying prospectus is current only as of the date of the applicable document.

ABOUT THIS PROSPECTUS SUPPLEMENT

Unless otherwise indicated or the context otherwise requires, references in this prospectus supplement to the “Company,” “PQG,” “we,” “us” and “our” refer to PQ Group Holdings Inc. and its consolidated subsidiaries.

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this common stock offering and certain other matters relating to us, our business and prospects. The second part, the accompanying prospectus, contains a description of our common stock and certain other information.

The information contained in this prospectus supplement may add, update or change information contained in the accompanying prospectus or in documents that we file or have filed with the Securities and Exchange Commission (the “SEC”). To the extent the information contained in this prospectus supplement differs or varies from the information contained in the accompanying prospectus or documents incorporated by reference filed before the date of this prospectus supplement, the information in this prospectus supplement will supersede such information.

TRADEMARKS AND TRADENAMES

We own or have rights to trademarks or trade names that we use in conjunction with the operation of our business. In addition, our name, logo and website name and address are our service marks or trademarks. Each trademark, trade name or service mark by any other company appearing in this prospectus supplement, the accompanying prospectus or in the documents incorporated by reference herein and therein belongs to its holder. Some of the more important trade names and trademarks that we use include PQ, Zeolyst, Zeolyst International and EcoServices. We also own or have the rights to copyrights that protect the content of our products. Solely for convenience, the trademarks, service marks, trade names and copyrights referred to in this prospectus supplement, the accompanying prospectus and in the documents incorporated by reference herein and therein are listed without the TM, SM, ® and © symbols, but we will assert, to the fullest extent under applicable law, our rights to these trademarks, service marks, trade names and copyrights.

SUPPLY SHARE AND INDUSTRY INFORMATION

Certain statistical information used throughout this prospectus supplement and in the documents incorporated by reference herein is based on independent industry publications, reports by research firms or other published independent sources. Some statistical information is also based on our good faith estimates, which are derived from management’s knowledge of our industry and such independent sources referred to above. Certain supply share statistics, ranking and industry information included in this prospectus supplement and in the documents incorporated by reference herein, including the size of certain markets and our estimated supply share position and the supply share positions of our competitors, are based on management estimates. These estimates have been derived from our management’s knowledge and experience in the industry and end uses into which we sell our products, as well as information obtained from surveys, reports by research firms, our customers, distributors, suppliers, trade and business organizations and other contacts in the industries into which we sell our products. We believe these data to be accurate as of the date of this prospectus supplement. However, this information may prove to be inaccurate because this information cannot always be verified with complete certainty due to the limitations on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties. Unless otherwise noted, all of our supply share position information presented in this prospectus supplement and in the documents incorporated by reference herein is an approximation based on management’s knowledge and is based on our, or, in the case of our zeolite catalysts product group, our Zeolyst Joint Venture’s, sales volumes relative to the estimated sales volumes for the year ended December 31, 2020 in relevant products or end uses into which we sell our products. In the case of our Refining Services segment, including the products and services thereof, such supply share position information excludes volume attributable to manufacturers who produce primarily for their own consumption. References to our being a leader in a supply share position or product group refer to our belief that we have one of the leading supply share positions, unless otherwise indicated or the context otherwise requires. In addition, references to various end uses into which we sell our products are based on how we define the end uses for our products.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights information appearing elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. This summary is not complete and does not contain all of the information that you should consider before investing in our common stock. You should carefully read the entire prospectus supplement, the accompanying prospectus and the financial data and related notes and other information incorporated by reference in this prospectus supplement and the accompanying prospectus before deciding whether to invest in our common stock. All information in this prospectus supplement assumes no exercise of the underwriters' option to purchase additional shares, unless otherwise noted.

Our Company

We are an integrated global provider of specialty catalysts, chemicals and services that enable environmental improvements and enhance consumer and industrial products. Our value-added products seek to address global demand trends that are often either the subject of significant environmental and safety regulations or are driven by consumer preferences for environmentally friendlier alternative products, which provides us with high-margin growth opportunities. Specifically, our products and solutions help companies produce vehicles with improved fuel efficiency and cleaner emissions. Our materials are critical ingredients in consumer products that make teeth brighter and skin softer. Because our products are predominantly inorganic and carbon-free, we believe we contribute to improving the sustainability of our planet.

We believe we are a leader in each of our business segments, holding what we estimate to be a number one or number two supply share position for products that generated more than 90% of our 2020 sales. We believe that our global footprint and efficient network of strategically located manufacturing facilities provide us with a strong competitive advantage in serving our customers both regionally as well as globally.

We believe, with our long history of established partnerships with our customers and our reputation for providing reliable, quality of products and solutions, our products deliver significant value to our customers, as demonstrated by our profit margins. Our products typically constitute a small portion of our customers' overall end-product costs yet are critical to product performance.

We have a near 200-year track record of innovation that is reflected in our technical and production expertise in silicates, silica, zeolites and catalyst technologies.

We are highly diversified by business, geography and end use. In 2020 the majority of our sales were for applications that have historically had relatively predictable, consistent demand patterns driven by consumption or frequent replacement cycles.

As a result of our competitive strengths, we have generally maintained stable margins through changing macroeconomic cycles.

In 2020, we served over 2,000 customers globally across many end uses and, as of December 31, 2020, operated 40 manufacturing facilities which are strategically located across five continents.

Our Industry

Our industry is characterized by constant development of new products and the need to support customers with new product innovation and technical services to meet their needs, coupled with consistent product quality and a reliable source of supply in a safe and environmentally sustainable manner. Products sold to our customers can

be high value-add even when they represent a small portion of the overall end product costs, and success can be achieved by helping customers improve their product performance, value, and quality. As a result, operating margins in this sector have historically been high and generally stable through economic cycles. In addition, many products in the specialty chemicals industry benefit from economics that favor incumbent producers because the capital cost to expand existing capacity is typically significantly less than the capital cost necessary to build a new plant. The combination of attractive operating margins and generally predictable maintenance capital expenditure requirements can produce attractive cash flows.

Our Business

We are an integrated, global provider of specialty catalysts, chemicals and services that share common end uses, manufacturing techniques, and process technology. We conduct operations through three reporting segments: (1) Refining Services, (2) Catalysts (including our 50% interest in the Zeolyst Joint Venture) and (3) Performance Chemicals.

Effective October 15, 2020, our former Performance Materials segment was treated as a discontinued operation and was subsequently sold on December 14, 2020.

On March 1, 2021, we announced that we entered into a definitive agreement to sell our Performance Chemicals business for \$1.1 billion, which transaction is expected to close by end of 2021, subject to regulatory approvals and customary closing conditions. We expect to use after-tax cash proceeds from the sale to reduce debt and return capital to our shareholders, subject to board approval and declaration. Beginning with the first quarter of 2021, we began to present the financial results of the Performance Chemicals business as discontinued operations.

Refining Services

Our Refining Services segment is a leading provider of sulfuric acid recycling (Regeneration Services) and end-to-end logistics to North American refineries for the production of alkylate, a high value gasoline blending component required for meeting gasoline specifications and producing premium grade fuel. We are also a leading North American producer of on-purpose virgin sulfuric acid for water treatment, mining, and industrial applications. By providing regeneration services, as well as purchasing by-product sulfur from customers as a source of energy and for use in manufacturing virgin sulfuric acid, we believe that we provide our refining customers with a complete solution for their sulfuric acid needs. Our primary product groups include Regeneration Services and Virgin Sulfuric Acid.

Catalysts

We are a leading global provider of customized and innovative catalyst products and process solutions to leading producers and licensors of polyethylene and methyl methacrylate. Our finished silica-based catalysts and catalyst supports are necessary to produce high strength and high stiffness plastics used in packaging films, bottles, containers, and other molded applications. Global consumer demand for high strength lightweight plastics is expected to continue in the near to medium term driving increased production capacity expansions. Our zeolite-based emission control catalysts enable the removal of nitrogen oxides from diesel engine emissions as well as sulfur dioxide from fuels during the refining process. The continued expansion of stricter global regulations for reducing sulfur in all fuel pools is expected to drive the ongoing demand for our products. Our product groups include Silica Catalysts and Zeolite Catalysts. Zeolite Catalyst products are sold through the Zeolyst Joint Venture.

Performance Chemicals

Our Performance Chemicals segment is a leading global producer of sodium silicates, and downstream specialty silicas as well as other silicate derivative products. These products are used in a wide variety of industrial and consumer applications such as matting agents in surface coatings, clarifying agents for edible oils and beverages, precursors for green tires, additives for dental cleaning and personal care products, and as feedstock for our additives and catalyst platforms. Given our products are derived from quartz sand, which makes them natural and inert materials, we believe they have the environmental and safety profile to address evolving customer demands to replace certain other chemicals. Silicates and silicate derivatives are recognized on the Safer Chemicals Ingredients List of the EPA's Safer Choice program, which we believe positively impacts our ability to compete in consumer product applications. Given the breadth of our global infrastructure in terms of scale operations, geographic diversity and production know-how, we are a leading global supplier to key multi-national industrial and consumer product companies. While we are global, our network is highly regionalized in silicate products and strategically located to support customers in a cost effective manner because of the expense of shipping sodium silicates extended distances due to their water content. We believe that we are the only global silicates producer who can supply all of the major regions, excluding China, and we estimate that we hold at least two times the sodium silicates supply share as our nearest competitor based on 2020 sales volume. Our product groups include Sodium Silicates, Specialty Silicas and Other Silicate Derivatives. On March 1, 2021, we announced that we entered into a definitive agreement to sell our Performance Chemicals business for \$1.1 billion, which transaction is expected to close by end of 2021, subject to regulatory approvals and customary closing conditions.

Recent Developments

Although we have not yet finalized our financial results for the quarter ended March 31, 2021, the following information reflects certain preliminary results from continuing operations for the first quarter ended March 31, 2021, and for which continuing operations for the first quarter of 2020 and 2021 excludes the Performance Materials and Performance Chemicals businesses. We expect to report that our sales are estimated to be in the range of \$123 million to \$127 million versus \$126 million and Zeolyst Joint Venture sales of \$28 million to \$30 million versus \$32 million in the same period in 2020. We also expect to report that our operating income is estimated in the range of \$1 million to \$3 million versus \$12 million (subject to finalization of discontinued operations for the Performance Chemicals segment) in the same period a year ago, and our Adjusted EBITDA is estimated to be in the range of \$40 million to \$42 million versus \$49 million (subject to finalization of discontinued operations for the Performance Chemicals segment) from the same period a year ago. The change in Adjusted EBITDA is largely due to an estimated \$9 million impact from the Texas storm in February 2021, which reduced sales volumes and increased maintenance costs for repairs. Additionally, higher Silica Catalysts sales were more than offset by an estimated \$6 million impact to our Refining Services business from the severe Texas storm. From the mid-point of the range, we estimate that the Texas storm negatively impacted our sales and Adjusted EBITDA by approximately 5% and 18%, respectively, as compared to the first quarter of last year.

The preliminary financial estimated results presented above are unaudited and preliminary estimates that have been prepared by management in good faith on a consistent basis with prior periods. However, we have not completed our financial closing procedures for the three months ended March 31, 2021 and actual results may differ from these preliminary estimates, and such differences could be material. The preliminary financial estimated results do not present all information necessary for an understanding of the Company's financial condition as of, and its results and operations for, the fiscal quarter ended March 31, 2021. Accordingly, undue reliance should not be placed on these preliminary estimates. In addition, PricewaterhouseCoopers LLP, our independent registered public accounting firm, has not audited, reviewed, compiled, or performed any procedures with respect to these preliminary financial estimated results and does not express an opinion or any other form of assurance with respect to these preliminary financial estimated results or their achievability. We undertake no

obligation to update or supplement the information provided above until we release our financial statements for the quarter ended March 31, 2021. We caution you that such preliminary estimates are not guarantees of our full financial results for the quarterly period or of future performance or outcomes and that actual results may differ materially from the estimates described above.

Presentation of Non-GAAP Financial Measures

In addition to the preliminary estimated results presented in accordance with U.S. generally accepted accounting principles (“GAAP”), the Company has also presented a non-GAAP financial measure — Adjusted EBITDA— which presents results on a basis adjusted for certain items. The Company uses Adjusted EBITDA for business planning purposes and in measuring its performance relative to that of its competitors. The Company believes that Adjusted EBITDA is an important metric to assess its operating performance from period-to-period by excluding certain items that the Company believes are not representative of its core business. Adjusted EBITDA is not intended to replace, and should not be considered superior to, the presentation of the Company’s financial results in accordance with GAAP. The Company’s presentation of Adjusted EBITDA likely differs from similar measures reported by other companies and, as a result, may not be comparable to other similarly titled measures. Adjusted EBITDA is reconciled from operating income from continuing operations under GAAP below.

The Company is not able to provide a reconciliation of Adjusted EBITDA to net income (the closest comparable financial measure presented in accordance with GAAP) without unreasonable effort or expense due to timing for completing our quarterly financial closing procedures, particularly related to discontinued operations. Items include certain non-cash, nonrecurring or other items that are included in net income as well as the related tax impacts of these items and changes in foreign currency exchange rates, due to the uncertainty and variability of the nature and amount of these charges and costs that will be determined as part of the Company’s financial closing procedures.

Zeolyst Joint Venture

The Company’s zeolite catalysts product group operates through its Zeolyst Joint Venture, which is accounted for as an equity method investment in accordance with GAAP. The presentation of the Zeolyst Joint Venture’s sales represents 50% of the sales of the Zeolyst Joint Venture. The Company does not record sales by the Zeolyst Joint Venture as revenue and such sales are not consolidated within the company’s results of operations. However, the Company’s Adjusted EBITDA reflects the share of earnings of the Zeolyst Joint Venture that have been recorded as equity in net income from affiliated companies in the Company’s consolidated statements of income for such periods and includes Zeolyst Joint Venture adjustments on a proportionate basis based on the Company’s 50% ownership interest. Accordingly, the Company’s Adjusted EBITDA margins are calculated including 50% of the sales of the Zeolyst Joint Venture for the relevant periods in the denominator.

Reconciliation of Operating Income to Adjusted EBITDA

	Three months ended March 31,	
	2021	2020
(in millions)		
Reconciliation of operating income attributable to PQ Group Holdings Inc. to Adjusted EBITDA		
Operating income ¹	\$ 2	\$ 12
Depreciation and amortization	20	19
EBITDA	22	31
Equity in net income from affiliated companies	5	8
Joint venture depreciation, amortization and interest ^(a)	4	4
Amortization of investment in affiliate step-up ^(b)	2	2
Net loss on asset disposals ^(c)	1	—
LIFO (benefit) expense ^(d)	—	(2)
Transaction and other related costs ^(e)	—	1
Equity-based compensation	6	4
Restructuring, integration and business optimization expenses ^(f)	2	—
Defined benefit pension plan cost ^(g)	—	—
Other ^(h)	(1)	1
Adjusted EBITDA ⁴	<u>41</u>	<u>\$ 49</u>

¹ Represents the midpoint of the range of operating income of \$1 to \$3 million and Adjusted EBITDA of \$40 to \$42 million.

Descriptions to PQ Non-GAAP Reconciliations

- (a) We use Adjusted EBITDA as a performance measure to evaluate our financial results. Because our Catalysts segment includes our 50% interest in the Zeolyst Joint Venture, we include an adjustment for our 50% proportionate share of depreciation, amortization and interest expense of the Zeolyst Joint Venture.
- (b) Represents the amortization of the fair value adjustments associated with the equity affiliate investment in the Zeolyst Joint Venture as a result of the combination of the businesses of PQ Holdings Inc. and Eco Services Operations LLC in May 2016. We determined the fair value of the equity affiliate investment and the fair value step-up was then attributed to the underlying assets of the Zeolyst Joint Venture. Amortization is primarily related to the fair value adjustments associated with fixed assets and intangible assets, including customer relationships and technical know-how.
- (c) When asset disposals occur, we remove the impact of net gain/loss of the disposed asset because such impact primarily reflects non-cash write-off of long-lived assets no longer in use.
- (d) Represents non-cash adjustments to the company's LIFO reserves for certain inventories in the U.S. that are valued using the LIFO method, which we believe provides a means of comparison to other companies that may not use the same basis of accounting for inventories.
- (e) Relates to certain transaction costs, including debt financing, due diligence and other costs related to transactions that are completed, pending or abandoned, that we believe are not representative of our ongoing business operations.
- (f) Includes the impact of restructuring, integration and business optimization expenses which are incremental costs that are not representative of our ongoing business operations.

- (g) Represents adjustments for defined benefit pension plan (benefit) costs in our statements of income. All of our defined benefit pension plan obligations are under defined benefit pension plans that are frozen. As such, we do not view such income or expenses as core to our ongoing business operations.
- (h) Included in this line-item are rounding discrepancies that may arise from rounding from dollars (in thousands) to dollars (in millions).

Corporate Information

Our principal executive offices are located at 300 Lindenwood Drive, Malvern, Pennsylvania 19355, and our telephone number is (610)651-4400. Our Internet website address is www.pqcorp.com. The information on, or that can be accessed through, our website is not part of this prospectus supplement or the accompanying prospectus, and you should not rely on any such information in making the decision whether to purchase our common stock.

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The Offering	
Common stock offered by the selling stockholders	12,500,000 shares
Option to purchase additional shares	The selling stockholders have granted the underwriters a 30-day option to purchase up to 1,875,000 additional shares.
Use of proceeds	We will not receive any of the proceeds from the sale of shares of common stock by the selling stockholders.
Risk factors	You should read carefully the information set forth under “Risk Factors” herein and in the accompanying prospectus for a discussion of factors that you should consider before deciding to invest in our common stock.
New York Stock Exchange trading symbol	“PQG”

RISK FACTORS

An investment in our common stock involves various risks. You should carefully consider the following risks and all of the other information contained in this prospectus supplement and the accompanying prospectus before investing in our common stock. In addition, you should read and consider the risk factors associated with our business included in the documents incorporated by reference in this prospectus supplement, including our Annual Report on Form 10-K for the year ended December 31, 2020. See “Where You Can Find More Information.” The risks described below and incorporated herein by reference are those which we believe are the material risks that we face. The trading price of our common stock could decline due to any of these risks, and you may lose all or part of your investment in our common stock.

Risks Related to Our Common Stock and this Offering

CCMP and INEOS continue to have significant influence over us, which could limit your ability to influence the outcome of key transactions, including a change of control.

Upon the completion of this offering, based on the 136,924,458 shares of common stock outstanding as of April 15, 2021, investment funds affiliated with CCMP Capital Advisors, LP (“CCMP”) will beneficially own approximately 39.29% of our outstanding common stock and INEOS Limited (“INEOS”) will beneficially own approximately 20.87% of our outstanding common stock (or approximately 38.40% and 20.39% respectively if the underwriters exercise their option to purchase additional shares in full). For as long as affiliates of CCMP and INEOS continue to beneficially own a substantial percentage of the voting power of our outstanding common stock, they will continue to have significant influence over us. For example, they will be able to strongly influence or effectively control the election of all of the members of our board of directors and our business and affairs, including any determinations with respect to mergers or other business combinations, the acquisition or disposition of assets, the incurrence of additional indebtedness, the issuance of any additional shares of common stock or other equity securities, the repurchase or redemption of shares of our common stock and the payment of dividends.

Additionally, CCMP and INEOS are in the business of making investments in companies and may acquire and hold interests in businesses that compete directly or indirectly with us. CCMP and INEOS may also pursue acquisition opportunities that may be complementary to our business, and, as a result, those acquisition opportunities may not be available to us.

Our stock price could be extremely volatile and, as a result, you may not be able to resell your shares at or above the price you paid for them.

Since January 1, 2020, the price of our common stock, as reported on the New York Stock Exchange, has ranged from a low of \$8.50 on March 16, 2020 to a high of \$18.90 on March 9, 2021. In addition, the stock market in general has been highly volatile. As a result, the market price of our common stock is likely to be similarly volatile, and investors in our common stock may experience a decrease, which could be substantial, in the value of their stock, including decreases unrelated to our operating performance or prospects, and could lose part or all of their investment. The price of our common stock could be subject to wide fluctuations in response to a number of factors, including those described elsewhere herein and others such as:

- variations in our operating performance and the performance of our competitors;
- actual or anticipated fluctuations in our quarterly or annual operating results;
- publication of research reports by securities analysts about us, our competitors or our industry;
- our failure or the failure of our competitors to meet analysts’ projections or guidance that we or our competitors may give to the market;
- additions or departures of key personnel;

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- strategic decisions by us or our competitors, such as acquisitions, divestitures, spin-offs, joint ventures, strategic investments or changes in business strategy;
- the passage of legislation or other regulatory developments affecting us or our industry;
- changes in legislation, regulation and government policy as a result of the U.S. presidential and congressional elections;
- speculation in the press or investment community;
- changes in accounting principles;
- terrorist acts, acts of war or periods of widespread civil unrest;
- natural disasters and other calamities, including pandemics; and
- changes in general market and economic conditions.

In addition, broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance, and factors beyond our control may cause our stock price to decline rapidly and unexpectedly. We are exposed to the impact of any global or domestic economic disruption, including any impact of the United Kingdom's exit from the European Union, commonly referred to as "Brexit."

In the past, securities class action litigation has often been initiated against companies following periods of volatility in their stock price. This type of litigation could result in substantial costs and divert our management's attention and resources, and could also require us to make substantial payments to satisfy judgments or to settle litigation.

Your percentage ownership in us may be diluted by future issuances of capital stock, which could reduce your influence over matters on which stockholders vote.

Our board of directors has the authority, without action or vote of our stockholders, to issue all or any part of our authorized but unissued shares of common stock, including shares issuable upon exercise of options, or shares of our authorized but unissued preferred stock, subject to the applicable rules of the New York Stock Exchange. Issuances of common stock or voting preferred stock would reduce your influence over matters on which our stockholders vote and, in the case of issuances of preferred stock, would likely result in your interest in us being subject to the prior rights of holders of that preferred stock.

There may be sales of a substantial amount of our common stock after this offering by our current stockholders, and these sales could cause the price of our common stock to fall.

As of April 15, 2021, there were 136,924,458 shares of our common stock outstanding. Of our issued and outstanding shares, all of the common stock sold in our initial public offering or in this offering will be freely transferable, except for any shares held by our "affiliates," as that term is defined in Rule 144 under the Securities Act of 1933, as amended (the "Securities Act"). Following completion of this offering, approximately 39.29% and 20.87% of our outstanding common stock (or approximately 38.40% and 20.39% if the underwriters exercise their option to purchase additional shares in full) will be held by affiliates of CCMP and by INEOS, respectively. Sales of substantial amounts of our common stock in the public market after this offering, or the perception that such sales will occur, could adversely affect the market price of our common stock and make it difficult for us to raise funds through securities offerings in the future.

In connection with this offering, each of our officers and directors and each of the selling stockholders have entered into a lock-up agreement with the underwriters, which regulates their sales of our common stock for a period of 90 days after the date of this prospectus supplement, subject to certain exceptions.

In addition, we have registered shares of our common stock that are reserved for issuance under our 2016 Stock Incentive Plan and 2017 Omnibus Incentive Plan.

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Provisions in our charter documents and Delaware law may deter takeover efforts that may be beneficial to stockholder value.

In addition to the beneficial ownership by investment funds affiliated with CCMP and INEOS of a substantial percentage of our common stock, provisions in our certificate of incorporation and bylaws and Delaware law could make it harder for a third party to acquire us, even if doing so might be beneficial to our stockholders. These provisions include a classified board of directors and the ability of our board of directors to issue preferred stock without stockholder approval that could be used to dilute a potential hostile acquiror. Our certificate of incorporation imposes some restrictions on mergers and other business combinations between us and any holder of 15% or more of our outstanding common stock other than INEOS and investment funds affiliated with CCMP. As a result, you may lose your ability to sell your stock for a price in excess of the prevailing market price due to these protective measures, and efforts by stockholders to change the direction or management of the company may be unsuccessful.

Our certificate of incorporation designates courts in the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our certificate of incorporation provides that, subject to limited exceptions, the Court of Chancery of the State of Delaware is the sole and exclusive forum for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders;
- any action asserting a claim against us arising pursuant to any provision of the General Corporation Law of the State of Delaware, our certificate of incorporation or our bylaws;
- any action to interpret, apply, enforce or determine the validity of our certificate of incorporation or bylaws; or
- any other action asserting a claim against us that is governed by the internal affairs doctrine (each, a "Covered Proceeding").

In addition, our certificate of incorporation provides that if any action the subject matter of which is a Covered Proceeding is filed in a court other than the specified Delaware courts without the approval of our board of directors (each, a "Foreign Action"), the claiming party will be deemed to have consented to (i) the personal jurisdiction of the specified Delaware courts in connection with any action brought in any such courts to enforce the exclusive forum provision described above and (ii) having service of process made upon such claiming party in any such enforcement action by service upon such claiming party's counsel in the Foreign Action as agent for such claiming party.

Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to these provisions. These provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and employees. Alternatively, if a court were to find these provisions of our certificate of incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business and financial condition.

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Our certificate of incorporation contains a provision renouncing our interest and expectancy in certain corporate opportunities, which could adversely impact our business.

Each of CCMP and INEOS, and the members of our board of directors who are affiliated with CCMP and INEOS, by the terms of our certificate of incorporation, are not required to offer us any corporate opportunity of which they become aware and can take any such corporate opportunity for themselves or offer it to other companies in which they have an investment. We, by the terms of our certificate of incorporation, expressly renounce any interest or expectancy in any such corporate opportunity to the extent permitted under applicable law, even if the opportunity is one that we or our subsidiaries might reasonably have pursued or had the ability or desire to pursue if granted the opportunity to do so. Our certificate of incorporation may not be amended to eliminate our renunciation of any such corporate opportunity arising prior to the date of any such amendment.

CCMP and INEOS are in the business of making investments in companies and may from time to time acquire and hold interests in businesses that compete directly or indirectly with us. These potential conflicts of interest could have a material adverse effect on our business, financial condition, results of operations or prospects if CCMP or INEOS allocate attractive corporate opportunities to themselves or their affiliates instead of to us.

We may not pay additional dividends on our common stock and, consequentially, you may not receive any return on investment unless you sell your common stock for a price greater than that which you paid for it.

Although we paid a special cash dividend in December 2020 of \$250 million and have announced an intent to pay a special cash dividend of up to \$2.50 to \$3.25 per share, subject to board approval and declaration, to be financed with the cash proceeds from our anticipated sale of our Performance Chemicals business, our board of directors may decide to retain future earnings, if any, for future operations, expansion and debt repayment and may not pay any special or regular dividends for the foreseeable future. Any decision to declare and pay special or regular dividends will be made at the discretion of our board of directors and will depend on, among other things, our results of operations, financial condition, cash requirements, contractual restrictions and other factors that our board of directors may deem relevant. In addition, our ability to pay dividends may be limited by covenants of any existing and future outstanding indebtedness we or our subsidiaries incur, including our credit facilities and outstanding notes. As a result, you may not receive any return on an investment in our common stock unless you sell your common stock for a price greater than that which you paid for it.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein include statements that express our opinions, expectations, beliefs, plans, objectives, assumptions or projections regarding future events or future results and therefore are, or may be deemed to be, “forward-looking statements.” These forward-looking statements can generally be identified by the use of forward-looking terminology, including the terms “believes,” “expects,” “may,” “will,” “should,” “seeks,” “projects,” “approximately,” “intends,” “plans,” “estimates” or “anticipates,” or, in each case, their negatives or other variations or comparable terminology. These forward-looking statements include all matters that are not historical facts. They appear in a number of places throughout this prospectus supplement, the accompanying prospectus and the documents incorporated herein and therein by reference and include, but are not limited to, statements regarding the sale of the Performance Chemicals business segment, including the intended use of proceeds therefrom, our future results of operations, financial condition, liquidity, prospects, growth, strategies, capital allocation program, product and service offerings, including the impact of the COVID-19 pandemic on such items, expected demand trends and our 2021 financial outlook.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. Some of the key factors that could cause actual results to differ from our expectations include the following risks related to our business:

- the impact of the ongoing COVID-19 pandemic on the global economy and financial markets, as well as on our business and our suppliers, and the response of governments and of our company to the outbreak;
- as a global business, we are exposed to local business risks in different countries;
- we are affected by general economic conditions and economic downturns;
- exchange rate fluctuations could adversely affect our financial condition, results of operations and cash flows;
- our international operations require us to comply with anti-corruption laws, trade and export controls and regulations of the U.S. government and various international jurisdictions in which we do business;
- alternative technology or other changes in our customers’ products may reduce or eliminate the need for certain of our products;
- our new product development and research and development efforts may not succeed and our competitors may develop more effective or successful products;
- our substantial level of indebtedness could adversely affect our financial condition;
- if we are unable to pass on increases in raw material prices, including natural gas, to our customers or to retain or replace our key suppliers, our results of operations and cash flows may be negatively affected;
- we face substantial competition in the industries in which we operate;
- we are subject to the risk of loss resulting from non-payment or non-performance by our customers;
- we rely on a limited number of customers for a meaningful portion of our business;
- multi-year customer contracts in our refining services segment are subject to potential early termination and such contracts may not be renewed at the end of their respective terms;
- our quarterly results of operations are subject to fluctuations because the demand for some of our products is seasonal;
- our growth projects may result in significant expenditures before generating revenues, if any, which may materially and adversely affect our ability to implement our business strategy;

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- we may be liable to damages based on product liability claims brought against us or our customers for costs associated with recalls of our or our customers' products;
- we are subject to extensive environmental, health and safety regulations and face various risks associated with potential non-compliance or releases of hazardous materials;
- existing and proposed regulations to address climate change by limiting greenhouse gas emissions may cause us to incur significant additional operating and capital expenses and may impact our business and results of operations;
- production and distribution of our products could be disrupted for a variety of reasons, and such disruptions could expose us to significant losses or liabilities;
- the insurance that we maintain may not fully cover all potential exposures;
- we could be subject to damages based on claims brought against us by our customers or lose customers as a result of the failure of our products to meet certain quality specifications
- our failure to protect our intellectual property and infringement on the intellectual property rights of third parties; and
- losses and damages in connection with information technology risks could adversely affect our operations.

The above is not a complete list of factors that could cause actual results to differ from our expectations, and it is not possible for us to predict all of them. Important factors that could cause actual results to differ materially from our expectations are more fully described in our other filings with the SEC, including in the "Risk Factors" section in our Annual Report on Form 10-K for the year ended December 31, 2020, and our subsequent filings with the SEC, incorporated by reference in this prospectus supplement. See "Where You Can Find More Information."

Although we base these forward-looking statements on assumptions that we believe are reasonable when made, we caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from those made in or suggested by the forward-looking statements contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein. In addition, even if our results of operations, financial condition and liquidity, and the development of the industry in which we operate, are consistent with the forward-looking statements, those results or developments may not be indicative of results or developments in subsequent periods.

Given these risks and uncertainties, you are cautioned not to place undue reliance on these forward-looking statements. Any forward-looking statement that we make in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein speaks only as of the date of such statement, and we undertake no obligation to update any forward-looking statements or to publicly announce the results of any revisions to any of those statements to reflect future events or developments, except as required by law.

USE OF PROCEEDS

We will not receive any proceeds from the sale of shares of our common stock by the selling stockholders.

DIVIDEND POLICY

Although we paid a special cash dividend of \$1.80 per share on December 29, 2020, which was financed with the net proceeds from the sale of our Performance Materials business, and we have announced an intent to pay a special cash dividend, subject to board approval and declaration, to be financed with the cash proceeds from our anticipated sale of our Performance Chemicals business, we may retain future earnings, if any, for future operations, expansion and debt repayment and may not pay any special or regular dividends for the foreseeable future. Any decision to declare and pay special or regular dividends in the future will be made at the discretion of our board of directors and will depend on, among other things, our results of operations, financial condition, cash requirements, contractual restrictions and other factors that our board of directors may deem relevant. In addition, our ability to pay dividends may be limited by covenants of any existing and future outstanding indebtedness we or our subsidiaries incur, including our credit facilities and outstanding notes.

SELLING STOCKHOLDERS

The following table and footnotes set forth information with respect to the beneficial ownership of our common stock as of April 15, 2021 by each of the selling stockholders.

The percentage ownership information shown in the table below is based upon 136,924,458 shares of common stock outstanding as of April 15, 2021.

<u>Name</u>	<u>Shares Owned Before the Offering</u>		<u>Shares Offered Hereby (no option exercise)</u>	<u>Shares Owned After the Offering (no option exercise)</u>	
	<u>Number</u>	<u>Percentage</u>		<u>Number</u>	<u>Percentage</u>
CCMP Capital Investors III, L.P. and related investment funds ⁽¹⁾	61,962,767	45.25%	8,164,010	53,798,757	39.29%
INEOS Limited ⁽²⁾	32,909,062	24.03%	4,335,990	28,573,072	20.87%

- (1) Includes 29,370,897 shares of our Common Stock held by CCMP Capital Investors III, L.P. (“CCMP Capital Investors”), 2,977,037 shares of our Common Stock held by CCMP Capital Investors III (Employee), L.P. (“CCMP Employee”), 8,954,565 shares of our Common Stock held by CCMP Capital Investors III (AV-7), L.P. (“CCMP AV-7”), 506,610 shares of our Common Stock held by CCMP Capital Investors III(AV-8), L.P. (“CCMP AV-8”), 10,127,880 shares of our Common Stock held by CCMP Capital Investors III(AV-9), L.P. (“CCMP AV-9”), 663,600 shares of our Common Stock held by CCMP Capital Investors III (AV-10), L.P. (“CCMP AV-10” and, together with CCMP Capital Investors, CCMP Employee, CCMP AV-7, CCMP AV-8 and CCMP AV-9, the “CCMP Capital Funds”) and 9,362,178 shares of our Common Stock held by Quartz Co-Invest, L.P. (“Quartz” and, together with the CCMP Capital Funds, the “CCMP Investors”). The general partner of the CCMP Capital Funds is CCMP Capital Associates III, L.P. (“CCMP Capital Associates”). The general partner of CCMP Capital Associates is CCMP Capital Associates III GP, LLC (“CCMP Capital Associates GP”). The general partner of Quartz is CCMP Co-Invest III A GP, LLC (“CCMP Co-Invest GP”). CCMP Capital Associates GP and CCMP Co-Invest GP are each wholly owned by CCMP Capital, LP. The general partner of CCMP Capital, LP is CCMP Capital GP, LLC (“CCMP Capital GP”). CCMP Capital GP ultimately exercises voting and investment power over the shares of our Common Stock held by the CCMP Investors. As a result, CCMP Capital GP may be deemed to share beneficial ownership with respect to the shares of our Common Stock held by the CCMP Investors. The investment committee of CCMP Capital GP with respect to the shares of our Common Stock includes Greg Brenneman and Timothy Walsh each of whom serves as a director of the Company. Each of the CCMP entities has an address of c/o CCMP Capital Advisors, LP, 277 Park Avenue, New York, New York 10172.
- (2) The shareholders of INEOS Limited are James A. Ratcliffe, John Reece and Andrew Currie. Mr. Ratcliffe, as the majority owner of INEOS Limited, has the power to control the voting and disposition of the shares of our common stock held by INEOS Limited. The address of INEOS Limited is 38 Hans Cres, Knightsbridge, London SW1X 0LZ, United Kingdom.

MATERIAL U.S. FEDERAL INCOME AND ESTATE TAX CONSIDERATIONS FOR NON-U.S. HOLDERS OF COMMON STOCK

The following is a summary of the material U.S. federal income and estate tax considerations relating to the purchase, ownership and disposition of our common stock by Non-U.S. Holders (defined below). This summary does not purport to be a complete analysis of all the potential tax considerations relevant to Non-U.S. Holders. This summary is based upon the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code"), the Treasury regulations promulgated or proposed thereunder and administrative and judicial interpretations thereof, all as of the date hereof and all of which are subject to change at any time, possibly on a retroactive basis.

This summary assumes that shares of our common stock are held as "capital assets" within the meaning of Section 1221 of the Internal Revenue Code. This summary does not purport to deal with all aspects of U.S. federal income and estate taxation that might be relevant to particular Non-U.S. Holders in light of their particular investment circumstances or status, nor does it address specific tax considerations that may be relevant to particular persons (including, for example, financial institutions, broker-dealers, taxpayers subject to special tax accounting rules under Section 451(b) of the Internal Revenue Code, insurance companies, partnerships or other pass-through entities, certain U.S. expatriates, tax-exempt organizations, pension plans, "controlled foreign corporations", "passive foreign investment companies", corporations that accumulate earnings to avoid U.S. federal income tax, persons in special situations, such as those who have elected to mark securities to market or those who hold common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment, or holders subject to the alternative minimum tax). In addition, except as explicitly addressed herein with respect to estate tax, this summary does not address estate and gift tax considerations, the Medicare contribution tax on net investment income, or considerations under the tax laws of any state, local or non-U.S. jurisdiction.

For purposes of this summary, a "Non-U.S. Holder" means a beneficial owner of common stock that for U.S. federal income tax purposes is not classified as a partnership and that, for U.S. federal income tax purposes, is not:

- an individual who is a citizen or resident of the United States;
- a corporation or any other organization taxable as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is included in gross income for U.S. federal income tax purposes regardless of its source; or
- a trust if (1) a U.S. court is able to exercise primary supervision over the trust's administration and one or more U.S. persons have the authority to control all of the trust's substantial decisions or (2) the trust has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

If an entity that is classified as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of persons treated as its partners for U.S. federal income tax purposes will generally depend upon the status of the partner and the activities of the partnership. Partnerships and other entities that are classified as partnerships for U.S. federal income tax purposes and persons holding our common stock through a partnership or other entity classified as a partnership for U.S. federal income tax purposes are urged to consult their own tax advisors.

There can be no assurance that the Internal Revenue Service ("IRS") will not challenge one or more of the tax consequences described herein, and we have not obtained, nor do we intend to obtain a ruling from the IRS with respect to the U.S. federal income or estate tax consequences to a Non-U.S. Holder of the purchase, ownership or disposition of our common stock.

THIS SUMMARY IS FOR GENERAL INFORMATION ONLY AND IS NOT INTENDED TO BE TAX ADVICE. NON-U.S. HOLDERS ARE URGED TO CONSULT THEIR TAX ADVISORS CONCERNING THE U.S. FEDERAL INCOME AND ESTATE TAXATION, STATE, LOCAL AND NON-U.S. TAXATION AND OTHER TAX CONSEQUENCES TO THEM OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK.

Distributions on Our Common Stock

As discussed under “Dividend Policy” above, we do not currently intend to pay regular dividends on our common stock. However, we expect to reevaluate our dividend policy on a regular basis following this offering and may, subject to compliance with the covenants contained in our senior secured credit facilities and other considerations, determine to pay dividends in the future. In the event that we make a distribution of cash or property with respect to our common stock, any such distributions generally will constitute dividends for U.S. federal income tax purposes to the extent of our current and accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will constitute a return of capital and will first reduce the holder’s adjusted tax basis in our common stock, but not below zero. Any remaining excess will be treated as capital gain, subject to the tax treatment described below in “—Gain on Sale, Exchange or Other Taxable Disposition of Our Common Stock.” Any such distribution would also be subject to the discussions below under the sections titled “—Additional Withholding and Reporting Requirements” and “—Backup Withholding and Information Reporting.”

Dividends paid to a Non-U.S. Holder generally will be subject to a 30% U.S. federal withholding tax unless such Non-U.S. Holder provides us or the applicable withholding agent, as the case may be, with the appropriate IRS Form W-8, such as:

- IRS Form W-8BEN or IRS Form W-8BEN-E (or successor forms) certifying, under penalties of perjury, a reduction in, or exemption from, withholding under an applicable income tax treaty, or
- IRS Form W-8ECI (or successor form) certifying, under penalties of perjury, that a dividend paid on common stock is not subject to withholding tax because it is effectively connected with a trade or business in the United States of the Non-U.S. Holder (in which case such dividend generally will be subject to regular graduated U.S. tax rates as described below).

The certification requirement described above must be provided to us or the applicable withholding agent prior to the payment of dividends and may be required to be updated periodically. The certification also may require a Non-U.S. Holder that provides an IRS form or that claims treaty benefits to provide its U.S. taxpayer identification number. Special certification and other requirements apply in the case of certain Non-U.S. Holders that hold shares of our common stock through intermediaries or are pass-through entities for U.S. federal income tax purposes.

Each Non-U.S. Holder is urged to consult its own tax advisor about the specific methods for satisfying these requirements. A claim for exemption will not be valid if the person receiving the applicable form has actual knowledge or reason to know that the statements on the form are false.

If dividends are effectively connected with a trade or business in the United States of a Non-U.S. Holder (and, if required by an applicable income tax treaty, are attributable to a U.S. permanent establishment), the Non-U.S. Holder, although exempt from the withholding tax described above (provided that the certification requirements described above are satisfied), generally will be subject to U.S. federal income tax on such dividends on a net income basis in the same manner as if it were a United States person, as defined under the Internal Revenue Code. In addition, if a Non-U.S. Holder is treated as a corporation for U.S. federal income tax purposes, the Non-U.S. Holder may be subject to an additional “branch profits tax” equal to 30% (unless reduced by an applicable income treaty) of its earnings and profits in respect of such effectively connected dividend income.

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Non-U.S. Holders that do not timely provide us or the applicable withholding agent with the required certification, but which are eligible for a reduced rate of U.S. federal withholding tax pursuant to an income tax treaty, may obtain a refund or credit of any excess amount withheld by timely filing an appropriate claim for refund with the IRS.

Gain on Sale, Exchange or Other Taxable Disposition of Our Common Stock

Subject to the discussions below under the sections titled “—Additional Withholding and Reporting Requirements” and “—Backup Withholding and Information Reporting”, in general, a Non-U.S. Holder will not be subject to U.S. federal income tax or withholding tax on gain realized upon such holder’s sale, exchange or other taxable disposition of shares of our common stock unless (i) such Non-U.S. Holder is an individual who is present in the United States for 183 days or more in the taxable year of disposition, and certain other conditions are met, (ii) we are or have been a “United States real property holding corporation”, as defined in the Internal Revenue Code (a “USRPHC”), at any time within the shorter of the five-year period preceding the disposition and the Non-U.S. Holder’s holding period in the shares of our common stock, and certain other requirements are met, or (iii) such gain is effectively connected with the conduct by such Non-U.S. Holder of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment maintained by such Non-U.S. Holder in the United States).

If the first exception applies, the Non-U.S. Holder generally will be subject to U.S. federal income tax at a rate of 30% (or at a reduced rate under an applicable income tax treaty) on the amount by which such Non-U.S. Holder’s capital gains allocable to U.S. sources exceed capital losses allocable to U.S. sources during the taxable year of the disposition. If the third exception applies, the Non-U.S. Holder generally will be subject to U.S. federal income tax with respect to such gain on a net income basis in the same manner as if it were a resident of the United States and a Non-U.S. Holder that is a corporation for U.S. federal income tax purposes may also be subject to a branch profits tax with respect to any earnings and profits attributable to such gain at a rate of 30% (or at a reduced rate under an applicable income tax treaty).

Generally, a corporation is a USRPHC only if the fair market value of its United States real property interests (as defined in the Internal Revenue Code) equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance in this regard, we believe that we are not, and do not anticipate becoming, a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our United States real property interests relative to the fair market value of other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we are or were to become a USRPHC, a Non-U.S. Holder would not be subject to U.S. federal income tax on a sale, exchange or other taxable disposition of our common stock by reason of our status as USRPHC so long as our common stock is “regularly traded” (as defined by applicable Treasury regulations) on an established securities market at any time during the calendar year in which the disposition occurs and such Non-U.S. Holder does not own and is not deemed to own (directly, indirectly or constructively) more than 5% of our common stock at any time during the shorter of the five-year period ending on the date of disposition and the holder’s holding period. However, no assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above. Prospective investors are encouraged to consult their own tax advisors regarding the possible consequences to them if we are, or were to become, a USRPHC.

Additional Withholding and Reporting Requirements

Sections 1471 through 1474 of the Internal Revenue Code and the related Treasury regulations, together with other U.S. Treasury and IRS guidance issued thereunder and intergovernmental agreements, legislation, rules and other official guidance adopted pursuant to such intergovernmental agreements (collectively, “FATCA”)

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generally impose U.S. federal withholding at a rate of 30% on payments of dividends on our common stock on certain non-U.S. entities (including certain intermediaries) unless such persons establish that they are compliant with or exempt from FATCA. This regime requires, among other things, a broad class of persons to enter into agreements with the IRS to obtain, disclose and report information about their investors and account holders. An intergovernmental agreement between the U.S. and an applicable foreign country may, however, modify these requirements.

Under the applicable Treasury regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends on shares of our common stock to such applicable non-U.S. entities that fail to establish they are compliant with or exempt from FATCA. While withholding under FATCA would have also applied to payments of gross proceeds from the sale or other disposition of stock on or after January 1, 2019 by such applicable non-U.S. entities, proposed Treasury regulations (on which taxpayers may currently rely) eliminate FATCA withholding on payments of gross proceeds from the sale or other disposition of stock entirely. Taxpayers generally may rely on these proposed Treasury regulations until final Treasury regulations are issued.

Prospective investors should consult their own tax advisors regarding the possible impact of these rules on their investment in our common stock, and the entities through which they hold our common stock, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of this 30% withholding tax under FATCA.

Backup Withholding and Information Reporting

In general, information reporting will apply to distributions on our common stock paid to a Non-U.S. Holder and the tax withheld, if any, with respect to the distributions. Non-U.S. Holders may have to comply with specific certification procedures to establish that the holder is not a United States person (as defined in the Internal Revenue Code) in order to avoid backup withholding at the applicable rate, currently 24%, with respect to dividends on our common stock. Dividends paid to Non-U.S. Holders subject to the U.S. withholding tax, as described above under the section titled “—Distributions on Our Common Stock,” generally will be exempt from U.S. backup withholding.

Information reporting and, depending on the circumstances, backup withholding will generally apply to the proceeds of a disposition of our common stock by a Non-U.S. Holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a Non-U.S. Holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a Non-U.S. Holder where the transaction is effected outside the United States through a Non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a Non-U.S. office of a U.S. broker or a foreign broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Prospective investors should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available to the tax authorities of the country in which the Non-U.S. Holder resides or in which the Non-U.S. Holder is incorporated, under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a Non-U.S. Holder may be refunded or credited against the Non-U.S. Holder's U.S. federal income tax liability, if any, provided that an appropriate claim is timely filed with the IRS.

Federal Estate Tax

Shares of our common stock that are owned (or treated as owned) by an individual who is not a citizen or resident of the United States (as specially defined for U.S. federal estate tax purposes) at the time of death will be included in such individual's gross estate for U.S. federal estate tax purposes, unless an applicable estate or other tax treaty provides otherwise, and therefore may be subject to U.S. federal estate tax.

UNDERWRITING

Citigroup Global Markets Inc. (“Citi”) and Deutsche Bank Securities Inc. (“Deutsche Bank”) are acting as joint book-running managers of the offering and as representatives of the underwriters named below. Subject to the terms and conditions stated in the underwriting agreement dated the date of this prospectus supplement, each underwriter named below has severally agreed to purchase, and the selling stockholders have agreed to sell to that underwriter, the number of shares set forth opposite the underwriter’s name.

Underwriter	Number of Shares
Citigroup Global Markets Inc.	3,125,000
Deutsche Bank Securities Inc.	3,125,000
Credit Suisse Securities (USA) LLC	1,625,000
BMO Capital Markets Corp.	1,062,500
Morgan Stanley & Co. LLC	1,062,500
Jefferies LLC	1,062,500
KeyBanc Capital Markets Inc.	1,062,500
C.L. King & Associates, Inc.	375,000
Total	12,500,000

The underwriting agreement provides that the obligations of the underwriters to purchase the shares included in this offering are subject to approval of legal matters by counsel and to other conditions. The underwriters are obligated to purchase all the shares (other than those covered by the underwriters’ option to purchase additional shares described below) if they purchase any of the shares.

Shares sold by the underwriters to the public will initially be offered at the public offering price set forth on the cover of this prospectus supplement. Any shares sold by the underwriters to securities dealers may be sold at a discount from the public offering price not to exceed \$ _____ per share. If all the shares are not sold at the public offering price, the underwriters may change the public offering price and the other selling terms.

The selling stockholders have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to 1,875,000 additional shares at the public offering price less the underwriting discount. To the extent the option is exercised, each underwriter must purchase a number of additional shares approximately proportionate to that underwriter’s initial purchase commitment. Any shares issued or sold under the option will be issued and sold on the same terms and conditions as the other shares that are the subject of this offering.

We, our officers and directors and the selling stockholders have agreed that, for a period of 90 days from the date of this prospectus supplement, we and they will not, without the prior written consent of Citi and Deutsche Bank, dispose of or hedge any shares or any securities convertible into or exchangeable for our common stock. Citi and Deutsche Bank in their sole discretion may release any of the securities subject to these lock-up agreements at any time without notice.

The shares are listed on the New York Stock Exchange under the symbol “PQG.”

The following table shows the underwriting discounts and commissions that the selling stockholders are to pay to the underwriters in connection with this offering. These amounts are shown assuming both no exercise and full exercise of the underwriters’ option to purchase additional shares described above.

	Paid by Selling Stockholders	
	No Exercise	Full Exercise
Per share	\$ _____	\$ _____
Total	\$ _____	\$ _____

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The expenses of the offering, including expenses incurred by the stockholders but not including the underwriting discount, are estimated at \$1.18 million and are payable by us. We have agreed to reimburse the underwriters for expenses relating to clearance of this offering with the Financial Industry Regulatory Authority up to \$25,000. The underwriters have agreed to reimburse us for certain expenses incurred in connection with the offering.

In connection with the offering, the underwriters may purchase and sell shares in the open market. Purchases and sales in the open market may include short sales, purchases to cover short positions, which may include purchases pursuant to the underwriters' option to purchase additional shares, and stabilizing purchases.

- Short sales involve secondary market sales by the underwriters of a greater number of shares than they are required to purchase in the offering.
 - "Covered" short sales are sales of shares in an amount up to the number of shares represented by the underwriters' option to purchase additional shares.
 - "Naked" short sales are sales of shares in an amount in excess of the number of shares represented by the underwriters' option to purchase additional shares.
- Covering transactions involve purchases of shares either pursuant to the underwriters' option to purchase additional shares or in the open market in order to cover short positions.
 - To close a naked short position, the underwriters must purchase shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.
 - To close a covered short position, the underwriters must purchase shares in the open market or must exercise the option to purchase additional shares. In determining the source of shares to close the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the underwriters' option to purchase additional shares.
- Stabilizing transactions involve bids to purchase shares so long as the stabilizing bids do not exceed a specified maximum.

Purchases to cover short positions and stabilizing purchases, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of the shares. They may also cause the price of the shares to be higher than the price that would otherwise exist in the open market in the absence of these transactions. The underwriters may conduct these transactions on the New York Stock Exchange, in the over-the-counter market or otherwise. If the underwriters commence any of these transactions, they may discontinue them at any time.

Relationships

The underwriters are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. The underwriters and their respective affiliates have in the past performed commercial banking, investment banking and advisory services for us from time to time for which they have received customary fees and reimbursement of expenses and may, from time to time, engage in transactions with and perform services for us in the ordinary course of their business for which they may receive customary fees and reimbursement of expenses. In the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time

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hold long and short positions in such securities and instruments. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments. For example, affiliates of certain of the underwriters also serve as lenders under our debt facilities.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make because of any of those liabilities.

Notice to Prospective Investors in the European Economic Area and the United Kingdom

Neither this prospectus nor any applicable free writing prospectus is a prospectus for the purposes of the Prospectus Regulation (as defined below). This prospectus and any applicable free writing prospectus has been prepared on the basis that any offer of the shares in any Member State of the European Economic Area or the United Kingdom (each, a “Relevant State”) will not be made to the public in that Relevant State and will be made pursuant to an exemption under the Prospectus Regulation from the requirement to publish a prospectus for offers of the shares. Accordingly, any person making or intending to make an offer in that Relevant State of the shares which are the subject of the offering contemplated in this prospectus or any applicable free writing prospectus may only do so in circumstances in which no obligation arises for us, the selling stockholders or any of the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Regulation in relation to such offer. Neither we, the selling stockholders nor the underwriters have authorized, nor do they authorize, the making of any offer of the shares in circumstances in which an obligation arises for us, the selling stockholders or the underwriters to publish a prospectus for such offer. The expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

In relation to each Relevant State, no offer of the shares which are the subject of the offering contemplated by this prospectus or any applicable free writing prospectus to the public may be made in that Relevant State other than:

- to any legal entity which is a qualified investor as defined in the Prospectus Regulation;
- to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation), subject to obtaining the prior consent of the relevant representatives nominated by us for any such offer; or
- in any other circumstances falling within Article 1(4) of the Prospectus Regulation, provided that no such offer of the shares shall require us, the selling stockholders or any of the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Regulation.

For the purposes of this provision, the expression an “offer to the public” in relation to any shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe for the shares.

Notice to Prospective Investors in the United Kingdom

This prospectus has not been approved by an authorized person in the United Kingdom and is for distribution only to persons who (i) are outside the United Kingdom, (ii) have professional experience in matters relating to investments (being investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the “Financial Promotion Order”)), (iii) are persons falling within Article 43(2) of the Financial Promotion Order, (iv) are persons falling within Article

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49(2)(a) to (d) (inter alios, high net worth companies or unincorporated associations) of the Financial Promotion Order, or (v) are persons to whom an invitation or inducement to engage in investment activity within the meaning of section 21 of the Financial Services and Markets Act 2000 (the “FSMA”) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as “relevant persons”). This prospectus is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this prospectus relates is available only to relevant persons and will be engaged in only with relevant persons. No part of this prospectus should be published, reproduced, distributed or otherwise made available in whole or in part to any other person.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser’s province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser’s province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Notice to Prospective Investors in France

Neither this prospectus nor any other offering material relating to the shares described in this prospectus has been submitted to the clearance procedures of the *Autorité des Marchés Financiers* or of the competent authority of another member state of the European Economic Area and notified to the *Autorité des Marchés Financiers*. The shares have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in France. Neither this prospectus nor any other offering material relating to the shares has been or will be:

- released, issued, distributed or caused to be released, issued or distributed to the public in France; or
- used in connection with any offer for subscription or sale of the shares to the public in France.

Such offers, sales and distributions will be made in France only:

- to qualified investors (*investisseurs qualifiés*) and/or to a restricted circle of investors (*cercle restreint d’investisseurs*), in each case investing for their own account, all as defined in, and in accordance with articles L.411-2, D.411-1, D.411-2, D.734-1, D.744-1, D.754-1 and D.764-1 of the French Code monétaire et financier;
- to investment services providers authorized to engage in portfolio management on behalf of third parties; or
- in a transaction that, in accordance with article L.411-2-II-1^o-or-2^o-or 3^o of the French Code monétaire et financier and article 211-2 of the General Regulations (*Règlement Général*) of the *Autorité des Marchés Financiers*, does not constitute a public offer (*appel public à l’épargne*).

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The shares may be resold directly or indirectly, only in compliance with articles L.411-1, L.411-2, L.412-1 and L.621-8 through L.621-8-3 of the French *Code monétaire et financier*.

Notice to Prospective Investors in Hong Kong

The shares may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), or (ii) to “professional investors” within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a “prospectus” within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong) and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Notice to Prospective Investors in Japan

The shares offered in this prospectus have not been and will not be registered under the Financial Instruments and Exchange Law of Japan. The shares have not been offered or sold and will not be offered or sold, directly or indirectly, in Japan or to or for the account of any resident of Japan (including any corporation or other entity organized under the laws of Japan), except (i) pursuant to an exemption from the registration requirements of the Financial Instruments and Exchange Law and (ii) in compliance with any other applicable requirements of Japanese law.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the “SFA”), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to compliance with conditions set forth in the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

shares, debentures and units of shares and debentures of that corporation or the beneficiaries’ rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

- to an institutional investor (for corporations, under Section 274 of the SFA) or to a relevant person defined in Section 275(2) of the SFA, or to any person pursuant to an offer that is made on terms that

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such shares, debentures and units of shares and debentures of that corporation or such rights and interest in that trust are acquired at a consideration of not less than S\$200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets, and further for corporations, in accordance with the conditions specified in Section 275 of the SFA;

- where no consideration is or will be given for the transfer; or
- where the transfer is by operation of law.

Solely for the purposes of its obligations pursuant to section 309B(1)(a) and 309B(1)(c) of the SFA and the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore (the “CMP Regulations 2018”), the issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the shares are “prescribed capital markets products” (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products; and MAS notice FAA-N16: Notice on Recommendations on Investment Products).

LEGAL MATTERS

The validity of the issuance of the shares of common stock to be sold in this offering will be passed upon for us by Ropes & Gray LLP. Certain legal matters in connection with this offering will be passed upon for the underwriters by Latham & Watkins LLP.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) of PQ Group Holdings Inc. incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2020 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

The financial statements of Zeolyst International incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2020 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the shares of our common stock being offered by this prospectus supplement and the accompanying prospectus. This prospectus supplement and the accompanying prospectus do not contain all of the information set forth in the registration statement. For further information with respect to us and the shares of our common stock, reference is made to the registration statement and its exhibits. Statements contained in this prospectus supplement or the accompanying prospectus as to the contents of any contract or other document are not necessarily complete. We are required to file annual, quarterly and current reports, proxy statements, and other information with the SEC. Such materials may be accessed electronically by means of the SEC's website at www.sec.gov.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus supplement information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus supplement and information in documents that we file later with the SEC will automatically update and supersede information in this prospectus supplement. We incorporate by reference into this prospectus supplement the documents listed below and any future filings made by us with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, except for information "furnished" under Items 2.02, 7.01 or 9.01 on Form 8-K or other information "furnished" to the SEC which is not deemed filed and not incorporated in this prospectus supplement, until the termination of this offering. We hereby incorporate by reference the following documents:

- our Annual Report on [Form 10-K](#) for the year ended December 31, 2020, filed with the SEC on March 17, 2021;
- the portions of our Definitive Proxy Statement on [Schedule 14A](#), filed with the SEC on April 1, 2021, that are incorporated by reference in our Annual Report on [Form 10-K](#) for the year ended December 31, 2019;

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- our Current Reports on Form 8-K filed with the SEC on [March 4, 2021](#), [March 16, 2021](#), [March 23, 2021](#) and [April 26, 2021](#), excluding, in each case, information “furnished” pursuant to Items 2.02, 7.01 or 9.01; and
- the description of our common stock contained in the Registration Statement on [Form 8-A](#), as filed with the SEC on September 29, 2017, and any amendment or report filed with the SEC for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

PQ Group Holdings Inc.
300 Lindenwood Drive
Malvern, PA 19355
(610) 651-4400

Copies of these filings are also available, without charge, on the SEC’s website at www.sec.gov and on our website at www.pqcorp.com as soon as reasonably practicable after they are filed electronically with the SEC. The information contained on our website is not a part of this prospectus supplement or the accompanying prospectus.



PQ Group Holdings Inc.

Common Stock

The selling stockholders to be named in a prospectus supplement may offer and sell shares of our common stock from time to time in amounts, at prices and on terms that will be determined at the time of the offering. We will not receive any proceeds from the sale of shares by the selling stockholders.

This prospectus describes the general manner in which the shares of our common stock may be offered and sold by the selling stockholders. The identity of, and specific information required with respect to, the selling stockholders, and the specific manner in which shares of our common stock may be offered and sold will be described in a supplement to this prospectus.

You should carefully read this prospectus and any accompanying prospectus supplement, together with the documents we incorporate by reference, before you invest in our common stock.

Our common stock is listed on the New York Stock Exchange (the "NYSE") under the symbol "PQG." The last reported sale of our common stock on the NYSE on April 23, 2021 was \$16.66 per share.

Investing in our common stock involves substantial risk. Please read ["Risk Factors"](#) beginning on page 2 of this prospectus and any risk factors described in any applicable prospectus supplement and in the documents we incorporate by reference.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Prospectus dated April 26, 2021

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We have not authorized anyone to provide any information or to make any representations other than those contained or incorporated by reference in this prospectus, any accompanying prospectus supplement or in any free writing prospectuses we have prepared. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus and any accompanying prospectus supplement are an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained or incorporated by reference in this prospectus and any accompanying prospectus supplement is current only as of the date of the applicable document.

ABOUT THIS PROSPECTUS

Unless otherwise stated in this prospectus or the context requires otherwise, references to “we,” “our,” “us,” “PQ Group Holdings Inc.” and the “Company” and similar terms refer to PQ Group Holdings Inc. and its consolidated subsidiaries.

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (“SEC”) as a “well-known seasoned issuer” as defined under Rule 405 under the Securities Act of 1933, as amended (the “Securities Act”), using a “shelf” registration process. Under this shelf registration process, the selling stockholders may from time to time sell shares of our common stock in one or more offerings. This prospectus provides you with a general description of our common stock. Each time the selling stockholders sell shares of our common stock under this shelf registration, we will provide a prospectus supplement that will contain specific information about the terms of that offering, including the specific amounts and prices of the shares of our common stock offered and information about the selling stockholders. The prospectus supplement may also add, update or change information contained in this prospectus. Any statement that we make in this prospectus will be modified or superseded by any inconsistent statement made by us in a prospectus supplement. Before making your investment decision, you should read both this prospectus and any prospectus supplement, including all documents incorporated herein or therein by reference, together with additional information described under “Where You Can Find More Information.”

RISK FACTORS

Investing in shares of our common stock involves a high degree of risk. See “Item IA. Risk Factors” in our most recent Annual Report on Form 10-K and in subsequent Quarterly Reports on Form 10-Q, which are incorporated by reference in this prospectus, and the “Risk Factors” section in the applicable prospectus supplement for a discussion of the factors you should carefully consider before deciding to purchase shares of our common stock.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and any information incorporated by reference into this prospectus or such prospectus supplement may contain certain “forward-looking statements.” You can generally identify these forward-looking statements by forward-looking words such as “believe,” “anticipate,” “expect,” “intend,” “plan,” “will,” “may,” “estimate,” “could,” “continue,” “ongoing,” “predict,” “potential,” “likely,” “seek,” and other similar expressions, as well as variations or negatives of these words. You can also identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. Such forward-looking statements are based on current expectations and involve inherent risks and uncertainties, including factors that could delay, divert or change any of them, and could cause actual outcomes to differ materially from current expectations.

Forward-looking statements are not guarantees of future performance and our actual results could differ materially from the results discussed in the forward-looking statements we make. In particular, you should consider the numerous risks described in the “Risk Factors” section of our most recent Annual Report on Form 10-K and in subsequent Quarterly Reports on Form 10-Q, which are incorporated by reference in this prospectus, and the risk factors contained in any applicable prospectus supplement or free writing prospectus. See “Where You Can Find More Information.”

As a result of these and other factors, we may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. The forward-looking statements contained in this prospectus reflect our views as of the date hereof. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

USE OF PROCEEDS

We will not receive any proceeds from the sale of shares of our common stock by the selling stockholders.

DESCRIPTION OF CAPITAL STOCK

General

Our authorized capital stock consists of 450,000,000 shares of common stock, par value \$0.01 per share, and 50,000,000 shares of undesignated preferred stock. The following summary describes all material provisions of our capital stock. We urge you to read our certificate of incorporation and our bylaws, which are included as exhibits to the registration statement of which this prospectus forms a part.

Our certificate of incorporation and bylaws contain provisions that are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and which may have the effect of delaying, deferring or preventing a future takeover or change in control of our company unless such takeover or change in control is approved by our board of directors. These provisions include a classified board of directors, elimination of the ability of stockholders to call special meetings, advance notice procedures for stockholder proposals and the ability of our board of directors to issue preferred stock without stockholder approval that could be used to dilute a potential hostile acquiror.

Common Stock

As of December 31, 2020, there were 136,318,557 shares of our common stock outstanding held of record by approximately 84 stockholders. Holders of our common stock are entitled to the following rights:

Dividend Rights. Subject to preferences that may apply to shares of preferred stock outstanding at the time, holders of outstanding shares of our common stock will be entitled to receive dividends out of assets legally available at the times and in the amounts as our board of directors may from time to time determine.

Voting Rights. Each outstanding share of our common stock is entitled to one vote on all matters submitted to a vote of stockholders. Holders of shares of our common stock shall have no cumulative voting rights.

Except as otherwise required under the Delaware General Corporation Law or provided for in our certificate of incorporation, all matters other than the election of directors are determined by a majority of the votes cast on the matter and all elections of directors are determined by a plurality of the votes cast. However, we have implemented a Majority Voting Policy for uncontested director elections (elections in which the number of nominees for election does not exceed the number of directors to be elected). In the event that the votes “withheld” from a nominee’s election exceed the votes cast “for” that nominee’s election, such nominee shall be required to submit his or her resignation to our board of directors for consideration. Our board of directors will then have the opportunity to determine whether to accept or reject such tendered resignation. Our board of directors, in making its decision, may consider any factors or other information that it considers appropriate or relevant.

Our board of directors will act within 120 days following certification of the shareholder vote. Thereafter, our board of directors will promptly publicly disclose, in a report furnished to the SEC, its decision regarding the tendered resignation, including its rationale for accepting or rejecting the tendered resignation. Our board of directors may accept a director’s resignation or reject the resignation. If our board of directors accepts a director’s resignation, or if a nominee for director is not elected and the nominee is not an incumbent director, then our board of directors, in its sole discretion, may fill any resulting vacancy or may decrease the size of our board of directors, in each case pursuant to our bylaws. If a director’s resignation is not accepted by our board of directors, such director will continue to serve until the next annual meeting of shareholders when such director’s class is up for re-election and until his or her successor is duly elected, or his or her earlier resignation or removal.

Preemptive Rights. Our common stock is not entitled to preemptive or other similar subscription rights to purchase any of our securities.

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Conversion or Redemption Rights. Our common stock does not have any conversion rights and there are no redemption or sinking fund provisions applicable to our common stock.

Liquidation Rights. Upon our liquidation, the holders of our common stock will be entitled to receive pro rata our assets that are legally available for distribution, after payment of all debts and other liabilities and subject to the prior rights of any holders of preferred stock then outstanding.

Stock Exchange Listing. Our common stock is listed on the New York Stock Exchange under the symbol “PQG.”

Preferred Stock

Our board of directors may, without further action by our stockholders, from time to time, direct the issuance of shares of preferred stock in series and may, at the time of issuance, determine the designations, powers, preferences, privileges, and relative participating, optional or special rights as well as the qualifications, limitations or restrictions thereof, including dividend rights, conversion rights, voting rights, terms of redemption and liquidation preferences, any or all of which may be greater than the rights of our common stock. Satisfaction of any dividend preferences of outstanding shares of preferred stock would reduce the amount of funds available for the payment of dividends on shares of our common stock. Holders of shares of preferred stock may be entitled to receive a preference payment in the event of our liquidation before any payment is made to the holders of shares of our common stock. Under certain circumstances, the issuance of shares of preferred stock may render more difficult or tend to discourage a merger, tender offer or proxy contest, the assumption of control by a holder of a large block of our securities or the removal of incumbent management. Upon the affirmative vote of a majority of the total number of directors then in office, our board of directors, without stockholder approval, may issue shares of preferred stock with voting and conversion rights which could adversely affect the holders of shares of our common stock and the market value of our common stock. As of December 31, 2020, there were no shares of preferred stock outstanding.

Anti-Takeover Effects of our Certificate of Incorporation and Bylaws

Our certificate of incorporation and bylaws contain certain provisions that are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and which may have the effect of delaying, deferring or preventing a future takeover or change in control of the company unless such takeover or change in control is approved by our board of directors. These provisions include:

Classified Board. Our certificate of incorporation provides that our board of directors be divided into three classes of directors, with the classes as nearly equal in number as possible. As a result, approximately one-third of our board of directors is elected each year. The classification of directors has the effect of making it more difficult for stockholders to change the composition of our board. Our certificate of incorporation also provides that, subject to any rights of holders of preferred stock to elect additional directors under specified circumstances, the number of directors is fixed exclusively pursuant to a resolution adopted by our board of directors. Our board of directors currently has eleven members.

Special Meetings of Stockholders. Our certificate of incorporation and bylaws provide that, except as otherwise required by law, special meetings of the stockholders can only be called by the chairman of our board or pursuant to a resolution adopted by a majority of our board of directors. Except as otherwise required by law, stockholders are not permitted to call a special meeting or to require our board of directors to call a special meeting.

Removal of Directors. Our certificate of incorporation provides that our directors may be removed only for cause by the affirmative vote of at least a majority of the voting power of our outstanding shares of capital stock entitled to vote generally in the election of directors, voting together as a single class.

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Advance Notice Procedures. Our bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors. Stockholders at an annual meeting are only able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors or by a stockholder who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given our Secretary timely written notice, in proper form, of the stockholder's intention to bring that business before the meeting. Although the bylaws do not give our board of directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting, the bylaws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of the company.

Authorized but Unissued Shares. Our authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of common stock and preferred stock could render more difficult or discourage an attempt to obtain control of a majority of our common stock by means of a proxy contest, tender offer, merger or otherwise.

Business Combinations with Interested Stockholders. We have elected in our certificate of incorporation not to be subject to Section 203 of the Delaware General Corporation Law, an antitakeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a business combination, such as a merger, with a person or group owning 15% or more of the corporation's voting stock for a period of three years following the date the person became an interested stockholder, unless (with certain exceptions) the business combination or the transaction in which the person became an interested stockholder is approved in a prescribed manner. Accordingly, we are not subject to any anti-takeover effects of Section 203. However, our certificate of incorporation contains provisions that have the same effect as Section 203, except that they provide that INEOS Limited (as a permitted transferee of INEOS Investments Partnership ("INEOS")) and investment funds affiliated with CCMP Capital Advisors, LP ("CCMP"), and certain of their respective transferees and affiliates will not be deemed to be "interested stockholders," regardless of the percentage of our voting stock owned by them, and accordingly will not be subject to such restrictions.

Exclusive Forum. Our certificate of incorporation provides that, subject to limited exceptions, the Court of Chancery of the State of Delaware is the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (iii) any action asserting a claim against us arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws, or (iv) any other action asserting a claim against us that is governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our certificate of incorporation described above. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against our directors and officers. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with one or more actions or proceedings described above, a court could find the choice of forum provisions contained in our certificate of incorporation to be inapplicable or unenforceable.

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Corporate Opportunities

Our certificate of incorporation provides that we renounce any interest or expectancy of the company in the business opportunities of CCMP and INEOS and of their respective officers, directors, agents, stockholders, members, partners, affiliates and subsidiaries and each such party shall not have any obligation to offer us those opportunities.

Limitations on Liability and Indemnification of Officers and Directors

Our certificate of incorporation limits the liability of our directors to the fullest extent permitted by the Delaware General Corporation Law or any other law of the state of Delaware and our bylaws provide that we may indemnify our directors and our officers that are appointed by our board of directors to the fullest extent permitted by applicable law. We have entered into indemnification agreements with our current directors and executive officers and expect to enter into similar agreements with any new directors or executive officers.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer and Trust Company, LLC.

PLAN OF DISTRIBUTION

The selling stockholders may sell shares of our common stock in any of the ways described below or in any combination thereof:

- to or through underwriters or dealers;
- through one or more agents; or
- directly to purchasers or to a single purchaser.

The distribution of shares of our common stock by the selling stockholders may be effected from time to time in one or more transactions:

- at a fixed price, or prices, which may be changed from time to time;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

Each time we offer and sell securities covered by this prospectus, we will make available a prospectus supplement or supplements. Each prospectus supplement will describe the method of distribution of the shares of our common stock and any applicable restrictions.

Each prospectus supplement will describe the terms of the offering of shares of our common stock, including the following:

- the name or names of any underwriters, dealers or agents and the number of shares of our common stock underwritten or purchased by each of them;
- if a fixed price offering, the public offering price of the shares of common stock and the proceeds to the selling stockholders;
- any discounts, commissions or concessions allowed or reallocated or paid to underwriters, dealers or agents, and other items constituting underwriters', dealers' or agents' compensation;
- any options under which underwriters may purchase additional securities;
- any delayed delivery arrangements; and
- information about the selling stockholders, including the relationship between the selling stockholders and us.

Any offering price and any discounts or concessions allowed or reallocated or paid to dealers will be specified in the applicable prospectus supplement and may be changed from time to time.

Only the agents or underwriters named in each prospectus supplement will be agents or underwriters in connection with the shares of our common stock being offered thereby.

The selling stockholders may authorize underwriters, dealers or other persons acting as our agents to solicit offers by certain institutions to purchase securities from the selling stockholders pursuant to delayed delivery contracts providing for payment and delivery on the date stated in each applicable prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in each applicable prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other

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institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will be subject only to those conditions set forth in the applicable prospectus supplement, and the applicable prospectus supplement will set forth any commissions we pay for solicitation of these contracts.

Agents, underwriters and other third parties described above may be entitled to indemnification by us and the selling stockholders against certain civil liabilities, including liabilities under the Securities Act, or to contribution from us and the selling stockholders with respect to payments which the agents, underwriters or third parties may be required to make in respect thereof. Agents, underwriters and such other third parties may be customers of, engage in transactions with, or perform services for us or the selling stockholders in the ordinary course of business. We and the selling stockholders may also use underwriters or such other third parties with whom we or such selling stockholders have a material relationship. We and the selling stockholders will describe the nature of any such relationship in the applicable prospectus supplement.

Certain underwriters may use this prospectus and any accompanying prospectus supplement for offers and sales related to market-making transactions in shares of our common stock. These underwriters may act as principal or agent in these transactions, and the sales will be made at prices related to prevailing market prices at the time of sale. Any underwriters involved in the sale of shares of our common stock may qualify as “underwriters” within the meaning of Section 2(a)(11) of the Securities Act. In addition, the underwriters’ commissions, discounts or concessions may qualify as underwriters’ compensation under the Securities Act and the rules of the Financial Industry Regulatory Authority.

Our common stock is listed on the New York Stock Exchange. Underwriters may make a market in shares of our common stock, but will not be obligated to do so and may discontinue any market making at any time without notice. We can make no assurance as to the development, maintenance or liquidity of any trading market in shares of our common stock.

Certain persons participating in an offering may engage in over-allotment, stabilizing transactions, short covering transactions and penalty bids in accordance with rules and regulations under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of shares of our common stock in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the shares of our common stock originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of shares of our common stock to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

There can be no assurance that the selling stockholders will sell any of the shares of our common stock registered pursuant to the registration statement of which this prospectus or any applicable prospectus supplement forms a part.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Ropes & Gray, LLP, Boston, Massachusetts. Certain legal matters relating to the shares of our common stock offered hereby will be passed upon on behalf of the underwriter(s) by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) of PQ Group Holdings Inc. incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2020 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

The financial statements of Zeolyst International incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2020 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the shares of our common stock being offered by this prospectus. This prospectus, which forms a part of the registration statement, does not contain all of the information set forth in the registration statement. For further information with respect to us and the shares of our common stock, reference is made to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or other document are not necessarily complete. We are required to file annual, quarterly and current reports, proxy statements and other information with the SEC. Such materials may be accessed electronically by means of the SEC's website at www.sec.gov.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus information we file with it, which means that we can disclose important information to you by referring to these documents. The information incorporated by reference is considered to be part of this prospectus and information in documents that we file later with the SEC will automatically update and supersede information in this prospectus. We incorporate by reference into this prospectus the documents listed below and any future filings made by us with the SEC under Section 13(a), 13(c), 14, or 15(d) of the Exchange Act, except for information "furnished" under Items 2.02, 7.01, or 9.01 on Form 8-K or other information "furnished" to the SEC which is not deemed filed and not incorporated in this prospectus, until the termination of the offering of securities described in the applicable prospectus supplement. We hereby incorporate by reference the following documents:

- our Annual Report on [Form 10-K](#) for the year ended December 31, 2020, filed with the SEC on March 17, 2021;
- the portions of our Definitive Proxy Statement on [Schedule 14A](#), filed with the SEC on April 1, 2021, that are incorporated by reference in our Annual Report on [Form 10-K](#) for the year ended December 31, 2020;

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- our Current Reports on Form 8-K filed with the SEC on [March 4, 2021](#), [March 16, 2021](#), [March 23, 2021](#) and [April 26, 2021](#), excluding, in each case, information “furnished” pursuant to Items 2.02, 7.01 or 9.01; and
- the description of our common stock contained in the Registration Statement on [Form 8-A](#), as filed with the SEC on September 29, 2017, and any amendment or report filed with the SEC for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing or telephoning us at:

PQ Group Holdings Inc.
300 Lindenwood Drive
Malvern, PA 19355
Phone: (610) 651-4400

Copies of the filings are also available, without charge on the SEC’s website, www.sec.gov, and on our website, <https://www.pqcorp.com>, as soon as reasonably practicable after they are filed electronically with the SEC. The information contained on our website is not a part of this prospectus.

12,500,000 Shares

PQ Group Holdings Inc.

Common Stock



Prospectus Supplement

Citigroup

Deutsche Bank Securities

Credit Suisse

BMO Capital Markets

Morgan Stanley

Jefferies

KeyBanc Capital Markets

C.L. King & Associates
