



## PyroGenesis Provides Corporate Update on Fumed Silica Business Line

August 17, 2026

### New developments include additional commercial and joint venture discussions

MONTREAL, Aug. 17, 2026 (GLOBE NEWSWIRE) -- PyroGenesis Inc. ("PyroGenesis" or the "Company") (TSX: PYR) (OTCQX: PYRGF) (FRA: 8PY1), a leader in ultra-high temperature processes and engineering innovation, and a plasma-based technology provider to heavy industry & defense, provides today an update for its Fumed Silica business line, which leverages off the unique advantages of the Company's plasma-based Fumed Silica Reactor (the "FSR") technology.

This update is being provided in response to investor requests.

### ABOUT FUMED SILICA

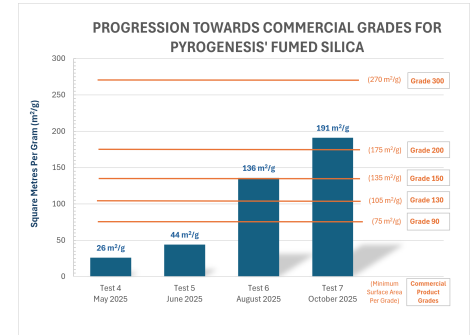
Fumed silica is a powder used worldwide as a thickening, anti-caking, and flow control agent in thousands of industrial and consumer products such as adhesives, glues, paints, thermal insulation, and fibre optic cables to pet litter, instant coffee, milkshakes, and cosmetics, amongst thousands of additional products.

### OPERATIONAL BACKGROUND

PyroGenesis invented a plasma-based system, the FSR, to convert quartz into fumed silica in a single eco-friendly step that represents a substantially simplified process compared to the complex multi-step process used by most conventional producers of fumed silica. The PyroGenesis FSR does not utilize any harmful chemicals that are typically required in conventional fumed silica production processes and, in addition, produces no hazardous by-products. PyroGenesis was engaged to develop the FSR technology by HPQ Silica Polvere Inc. ("Polvere"), a subsidiary of HPQ Silicon Inc. ("HPQ").

After a series of successful lab-scale tests, PyroGenesis built a pilot plant for testing and analysis. This pilot plant, which was completed and commissioned in 2025, commenced operation in the same year. Within 12 months, the FSR was producing several commercial grade products as reflected in the graph below. Each product grade has its own market, with 200-grade generally considered the standard, general-purpose grade and the most widely used because of its versatility and best balance of thickening and flow.<sup>123</sup> The Company may, in the future, produce niche commercial grades in addition to grades 200 and 150, but does not consider this essential.

Image 1:



Graph showing the rate of progression towards commercial grade standards for the fumed silica produced by PyroGenesis' fumed silica reactor.

Image 2:



Containers of fumed silica produced by PyroGenesis' fumed silica reactor.

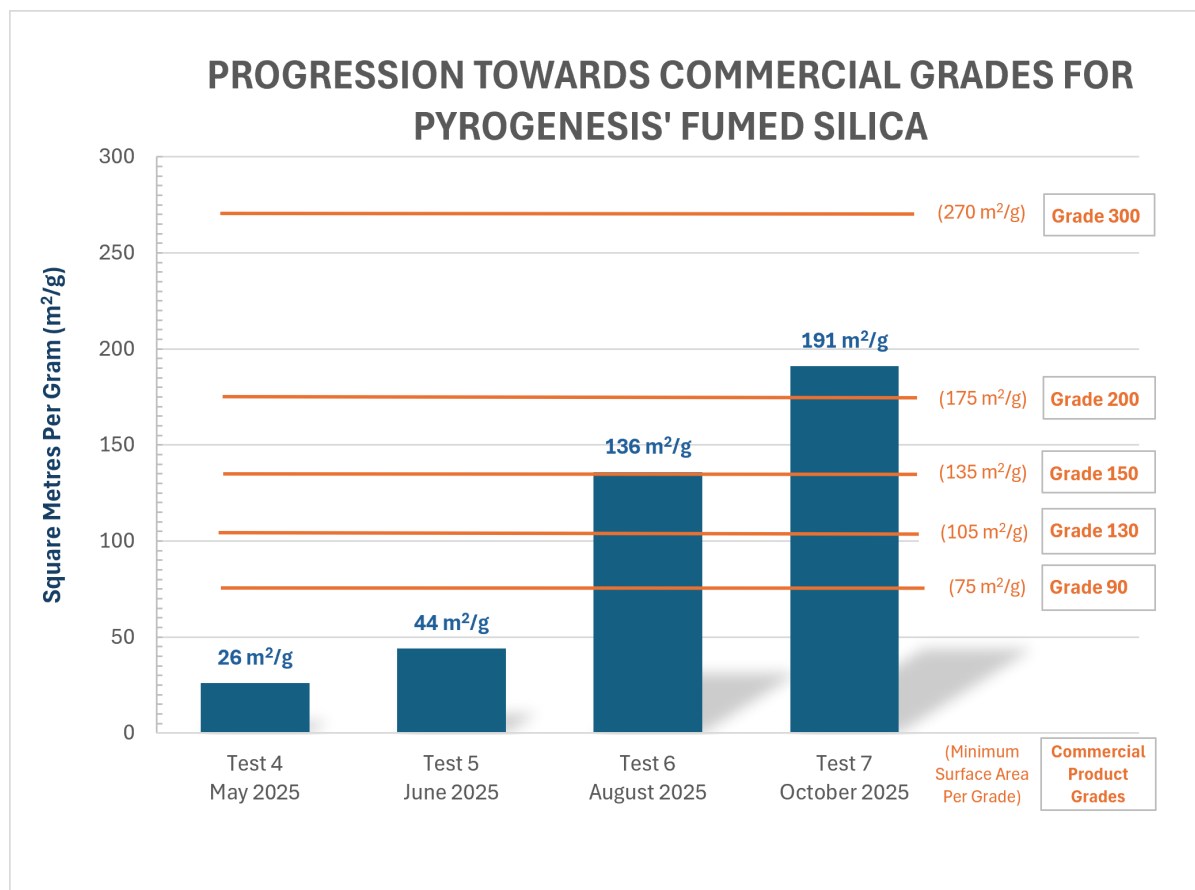


Image 1: graph showing the rate of progression towards commercial grade standards for the fumed silica produced by PyroGenesis' fumed silica reactor.

#### INITIAL INDUSTRY/CUSTOMER INTEREST

The successful test results produced by PyroGenesis and verified by third party labs attracted the attention of key fumed silica industry players. As a result, the company subsequently announced discussions with two separate entities:

- (i) The first entity is a [major global manufacturer](#) (the "Global Manufacturer") of fumed silica, who signed a letter of intent previously announced in July 9, 2024, that outlined the basis of collaboration between PyroGenesis and Polvere during the pilot scale phase of the FSR development. As per the MOU, the goal of the pilot scale phase was to validate the ability of the FSR to produce low-cost, low carbon material acceptable to the manufacturer's specifications. This was achieved to the client's satisfaction, resulting in discussions turning toward a commercial relationship.
- (ii) The second entity is a potential joint venture partner (the "Joint Venture Partner") who [signed a non-binding memorandum of understanding](#) with PyroGenesis and Polvere towards the formation of a joint venture company (the "JV"). The purpose of the JV is to operate a 1,000 tonne per year fumed silica production plant, with the fumed silica produced to be used by the Joint Venture Partner in a new application. PyroGenesis, under an exclusive manufacturing arrangement, would build the fumed silica reactor (FSR) for US\$20.0 million (approximately CA\$27.3 million). The expectation was that the plant would be delivered within 12 months of the formation of the JV. It was also expected that there would be a need for a series of additional fumed silica plants of the same or larger size. Discussions are currently stalled as PyroGenesis is not willing to agree to certain demands (including IP, exclusivity, cost breakdowns, etc.). PyroGenesis recently tabled a compromise position that is under review.

#### DEVELOPMENTS

- (i) Negotiations with the first entity, the Global Manufacturer, have progressed significantly.  
Following the successful completion of the pilot program objectives, the parties are evaluating potential frameworks for the next phase of their collaboration, including opportunities to support the commercial deployment of the FSR.
- (ii) Negotiations with the second entity, the Joint Venture Partner, continue.  
As previously stated, the formation of the JV will be contingent upon the successful negotiation and execution of one or more definitive agreements pertaining to the JV and related obligations by the parties thereto. PyroGenesis had previously announced that these documents are expected to be completed and signed no later than the end of Q2 2026. Discussions are currently stalled, with PyroGenesis recently proposing a compromise position for which we have yet to receive a response.



(iii) A third entity has recently initiated discussions.

This third entity is a potential new customer, who uses fumed silica in their end product, and wishes to collaborate in establishing a production facility in North America to better address the local market. Discussions involve large-scale bulk supply of fumed silica and/or local fumed silica production plants. Initial indications are that demand could require several 10,000 tonnes per year FSR systems.

(iv) A fourth entity has re-initiated discussions.

This fourth entity is an existing PyroGenesis customer with significant business operations in the Middle East. Discussions with this entity include the construction of a local fumed silica production plant to serve the Middle Eastern market. Negotiations planned for the 2<sup>nd</sup> half of 2026 will help determine the scale of the agreement, with discussions now focusing on a 10,000 tonnes per year production plant.

For each of the four initiatives listed above, PyroGenesis has an exclusive manufacturing arrangement to build the production plant(s).

"The fumed silica reactor is a strong example of what our company can achieve. Our all-electric, plasma-based, fumed silica reactor tackles a traditional process that relies on harmful chemicals and complex logistics, and radically changes the outcome," said Mr. P. Peter Pascali, President and CEO of PyroGenesis. "Fumed silica can now be produced with a materially lower CO<sub>2</sub> footprint, reduced energy intensity, a complete absence of harmful chemicals, and, more importantly, at a scale that remains economically attractive without requiring massive CAPEX. As such, the fumed silica reactor allows for profitable production at smaller scale. No longer will massive plants be required to produce fumed silica cost effectively. This ability to decouple profitability from sheer plant size changes the competitive landscape by opening the market to multiple local producers. It allows for more agile deployment, lower financial risk, and a production platform more aligned with the global push toward decarbonization. In our view, this is not an incremental improvement, but a structural change in fumed silica manufacturing."

"Separately, negotiations with the entities previously noted are taking longer than expected, as these larger companies take what I call a 'first-to-the-table' approach to negotiations," continued Mr. Pascali. "This is where the larger company's position is that the smaller company, like us, needs them more than they need us. As such, they try to extract extraordinary concessions from the smaller company. Faced with this situation, we are now talking with a number of players and we see this starting to level the playing field and helping to change the tone of negotiations. We hope to announce some important steps forward over the coming weeks."



Image 2: containers of fumed silica produced by PyroGenesis' fumed silica reactor.

#### INDUSTRY AND MARKET CONTEXT

- Fumed silica is one of the most widely used industrial materials and can be found in thousands of consumers and industrial products, including cosmetics, toothpaste, pet litter, powdered food, milkshakes, instant coffee, pharmaceuticals, agriculture, adhesives, paints, inks, photocopy toner, sealants, fiber optic cables, thermal insulation, construction materials, and batteries, to name a few. It is often used in these products as a thickening/anti-caking agent, used to stabilize and

improve the texture, consistency, and flow of the end-product.

- The global fumed silica market is projected to surpass US\$2.57 billion by 2034, driven by growing demand in the coatings, sealants, automotive, and lithium-ion battery sectors.<sup>4</sup>
- PyroGenesis was originally engaged to develop and build the FSR pilot plant for HPQ Silica Polvere Inc., a subsidiary of HPQ Silicon Inc.
- PyroGenesis has: (i) the rights, under an existing agreement with HPQ, to convert its annual royalty rights on future production of fumed silica, into a 50% interest in Polvere (an action that is currently underway and should be completed in Q3 2026), and (ii) an exclusive arrangement to be the sole supplier of equipment relating to any commercialization of the FSR.

#### About the Fumed Silica Reactor

PyroGenesis is the exclusive supplier of plasma-based technology that uses quartz (SiO<sub>2</sub>) as a raw material to produce commercial-grade fumed silica in a single and eco-friendly process while eliminating the use of harmful chemicals generated by some conventional methods. The FSR requires no additional processes to develop to prepare feedstock, and no intermediary toxic chemical-based processing. The FSR can produce fumed silica from quartz at one physical location. When compared to some multi-step, traditional processing methods, the expected benefits of our fumed silica reactor process can generally be summarized as follows:

1. Lower capital costs.
2. Lower operating costs.
3. Reduction of CO<sub>2</sub> emissions.
4. Reduction in energy footprint.
5. Elimination of purchase and storage requirements for hazardous chemicals.
6. Simplified logistics/shortened production chain due to the single location, single system, single phase process, and the elimination of feedstock ingredient handling, storage, preparation/transformation, and transportation.
7. Safer production environment due to absence of dangerous, toxic, or explosive chemicals.

#### About PyroGenesis Inc.

PyroGenesis leverages 35 years of plasma technology leadership to deliver advanced engineering solutions to energy, propulsion, destruction, process heating, emissions, and materials development challenges across heavy industry and defense. Its customers include global leaders in aluminum, aerospace, steel, iron ore, utilities, environmental services, military, and government. From its Montreal headquarters and local manufacturing facilities, PyroGenesis' engineers, scientists, and technicians drive innovation and commercialization of energy transition and ultra-high temperature technology. PyroGenesis' operations are ISO 9001:2015 and AS9100D certified, with ISO certification maintained since 1997. PyroGenesis' shares trade on the TSX (PYR), OTCQX (PYRGF), and Frankfurt (8PY1) stock exchanges.

#### Cautionary and Forward-Looking Statements

*This press release contains "forward-looking information" and "forward-looking statements" (collectively, "forward-looking statements") within the meaning of applicable securities laws. In some cases, but not necessarily in all cases, forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "targets", "expects" or "does not expect", "is expected", "an opportunity exists", "is positioned", "estimates", "intends", "assumes", "anticipates" or "does not anticipate" or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might", "will" or "will be taken", "occur" or "be achieved". In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances contain forward-looking statements. Forward-looking statements are not historical facts, nor guarantees or assurances of future performance but instead represent management's current beliefs, expectations, estimates and projections regarding future events and operating performance. Forward-looking statements are necessarily based on a number of opinions, assumptions and estimates that, while considered reasonable by PyroGenesis as of the date of this release, are subject to inherent uncertainties, risks and changes in circumstances that may differ materially from those contemplated by the forward-looking statements. Important factors that could cause actual results to differ, possibly materially, from those indicated by the forward-looking statements include, but are not limited to, the risk factors identified under "Risk Factors" in PyroGenesis' latest annual information form, and in other periodic filings that it has made and may make in the future with the securities commissions or similar regulatory authorities, all of which are available under PyroGenesis' profile on SEDAR+ at [www.sedarplus.ca](http://www.sedarplus.ca). These factors are not intended to represent a complete list of the factors that could affect PyroGenesis. However, such risk factors should be considered carefully. There can be no assurance that such estimates and assumptions will prove to be correct. You should not place undue reliance on forward-looking statements, which speak only as of the date of this release. PyroGenesis undertakes no obligation to publicly update or revise any forward-looking statement, except as required by applicable securities laws. Neither the Toronto Stock Exchange, its Regulation Services Provider (as that term is defined in the policies of the Toronto Stock Exchange) nor the OTCQX Best Market accepts responsibility for the adequacy or accuracy of this press release.*

For further information contact [ir@pyrogenesis.com](mailto:ir@pyrogenesis.com) or visit <http://www.pyrogenesis.com>

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<sup>1</sup> <https://www.knowde.com/stores/al2chem-specialties/products/al2chem-specialties-al-fs-200>

<sup>2</sup> <https://www.tcichemicals.com/CA/en/p/11200>

<sup>3</sup> <https://silmaterials.com/materials/fumed-silica/aerosil-200>

<sup>4</sup> <https://finance.yahoo.com/news/fumed-silica-market-reach-usd-143000439.html>

Photos accompanying this announcement are available at

<https://www.globenewswire.com/NewsRoom/AttachmentNg/34f29694-3b22-475a-a32a-664435b839b5>

<https://www.globenewswire.com/NewsRoom/AttachmentNg/e7eaf23c-7dde-441a-9452-dfda3dd462c6>

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