



## PyroGenesis Confirms Additional Independent Verification of Its Fumed Silica Meeting Commercial Grade “150”

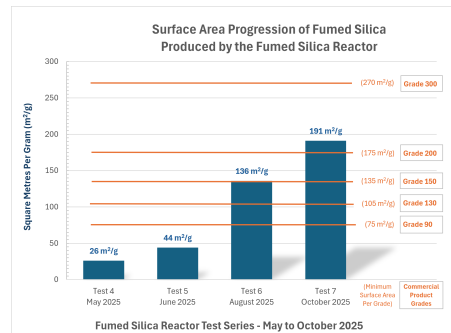
February 3, 2026

Fumed silica is now confirmed as being commercial grade 150 by multiple labs.

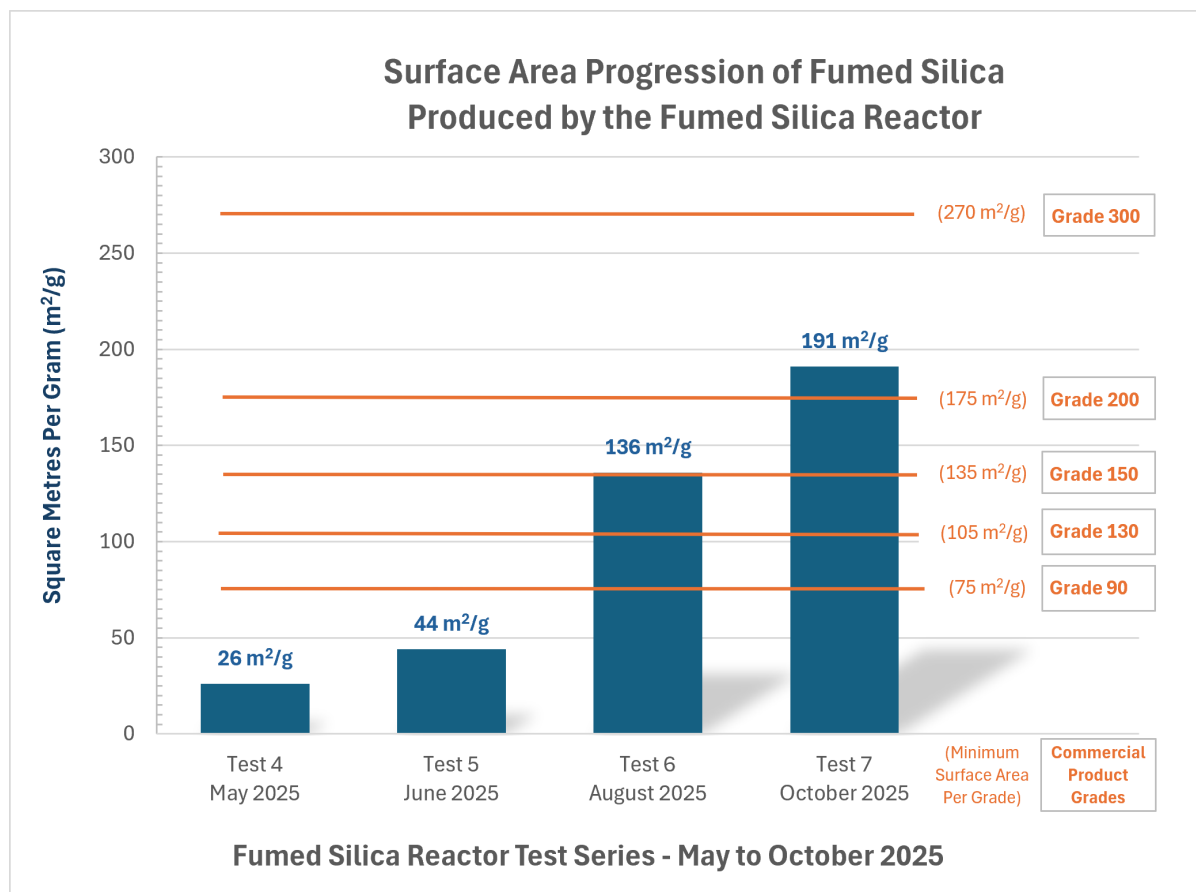
MONTREAL, Feb. 03, 2026 (GLOBE NEWSWIRE) -- PyroGenesis Inc. (“PyroGenesis” or “the Company”) (TSX: PYR) (OTCQX: PYRGF) (FRA: 8PY1), the leader in ultra-high temperature processes and engineering innovation, and a plasma-based technology provider to heavy industry & defense, confirms, further to a recent press release from the Company’s client HPQ Silicon Inc. (“HPQ”), receipt by the Company of additional independent verification of its most recent test results for fumed silica produced by the fumed silica reactor (FSR).

Specifically, a potential customer [[press release dated July 9, 2024](#)] who has been independently analyzing the various FSR test runs, has confirmed that the material produced during Test #7 meets established commercial benchmarks for fumed silica with a specific surface area (under BET analysis) of approximately 150 m<sup>2</sup>/g, while, more importantly, achieving the required viscosity for that commercial grade at the same time.

surface area progression of fumed silica produced by the fumed silica reactor



surface area progression of fumed silica produced by the fumed silica reactor



Graph: surface area progression of fumed silica produced by the fumed silica reactor.

“The results of test 7, and subsequent analysis and verification by two unrelated independent entities, confirm that the fumed silica reactor is now producing fumed silica at the important 150 commercial product grade,” said P. Peter Pascali, President and CEO of PyroGenesis. “As important is the fact that we have now replicated, at pilot scale, the results from our original lab-scale results for both viscosity and surface area of fumed silica. As some readers may recall, it was these initial findings that resulted in the interest exhibited by a global manufacturer of fumed silica, and with whom we have been working together to perfect the product. The question had always been, up to now, ‘...could we scale the results...?’ The viscosity results are particularly noteworthy, as it indicates that fumed silica produced at the pilot plant can be suitable for industrial applications including coatings,

adhesives and sealants, inks, elastomers, and insulation binders where viscosity, often referred to as rheology efficiency, is a critical performance metric.”

For fumed silica use in traditional markets, performance and market value are also closely linked to specific surface area measurements. Ongoing system modifications to the fumed silica reactor over the past few months have progressively increased the surface area from an initial recorded result of 26 m<sup>2</sup>/g to the current 191 m<sup>2</sup>/g. The company will continue to improve surface area as it targets additional commercial applications. Commercial fumed silica products are sold at a variety of different surface area measurements, including 90 m<sup>2</sup>/g, 130 m<sup>2</sup>/g, 150 m<sup>2</sup>/g, 200 m<sup>2</sup>/g, and 300 m<sup>2</sup>/g.

## INDUSTRY AND MARKET CONTEXT

- Fumed silica is one of the most widely used industrial materials, and can be found in thousands of 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.
- Fumed silica is often combined with other materials to enhance performance. For example, in tires, it is blended with carbon-black to improve wear and efficiency; in batteries, it is blended with graphite to enhance slurry uniformity and conductivity.
- PyroGenesis has been engaged to develop and build the FSR pilot plant for HPQ Polvere Inc. (“Polvere”), a subsidiary of HPQ.
- PyroGenesis has: (i) a 50% interest in Polvere, and (ii) an exclusive arrangement to be the sole supplier of equipment relating to any commercialization of this new process.

### About the Fumed Silica Reactor (FSR)

PyroGenesis has been designing, engineering, and constructing the fumed silica reactor pilot plant, for HPQ Polvere Inc., to convert quartz into fumed silica in a single and eco-friendly step, without the use of chemicals while producing no hazardous by-products. The plant is operational and undergoing various tests to (i) replicate the original lab-scale test results at pilot plant scale, which has now been achieved, (ii) meet the benchmarks for progressively higher grades of commercial products, and (iii) indicate the modifications necessary for the system to be fully scalable to various full-size commercial production levels.

### 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>

A photo accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/b20cb478-39fa-46bd-8a33-0bca500a0640>