

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **May 22, 2025**

SINTX Technologies, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction
of incorporation)

001-33624

(Commission
File Number)

84-1375299

(IRS Employer
Identification No.)

**1885 West 2100 South
Salt Lake City, UT 84119**

(Address of principal executive offices, including Zip Code)

Registrant's telephone number, including area code: **(801) 839-3500**

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class:

Common Stock, par value \$0.01 per share

Trading Symbol(s):

SINT

Name of each exchange on which registered:

The NASDAQ Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 7.01. Regulation FD. Disclosure.

On May 22, 2025, SINTX Technologies, Inc. (the “Company”) issued a press release announcing the issuance of a patent and formation of a subsidiary to advance antimicrobial applications in the agribiotech market. The full text of the press release is furnished as Exhibit 99.1 to this Form 8-K.

The information contained in this Item 7.01, including Exhibit 99.1 attached hereto, is being furnished and shall not be deemed to be “filed” for the purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liabilities of that section. Furthermore, the information contained in this Item 7.01 or Exhibit 99.1 shall not be deemed to be incorporated by reference into any registration statement or other document filed pursuant to the Securities Act of 1933, except as shall be expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits.**Exhibit No. Description**

99.1	Press Release, dated May 22, 2025
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

SINTX Technologies, Inc.

Date: May 22, 2025

By: /s/ Eric K. Olson

Eric K. Olson
Chief Executive Officer



SINTX Technologies Announces Patent Issuance and Formation of Subsidiary to Advance Antimicrobial Applications in the Agribiotech Market

SALT LAKE CITY, Utah – May 22, 2025 – SINTX Technologies, Inc. (NASDAQ: SINT) (“SINTX” or the “Company”), a leader in advanced ceramics for medical device and other technical applications, announced the issuance of International Patent No. 7635292, which covers novel agricultural uses of the Company’s silicon nitride (Si_3N_4) particularly in plant protection and antimicrobial treatment. This patent, combined with issued U.S. Patent No. 11,591,217, creates a family of patents focused on addressing the antimicrobial agribiotech market.

SINTX remains focused on advancing silicon nitride technologies for medical applications; however, the material’s broad utility allows for selective expansion into high-impact adjacent sectors. In line with this strategic expansion, the Company has formed a wholly-owned subsidiary that will have a dedicated management team focused on developing and commercializing agricultural and environmental technologies—signaling the official launch of SINTX Agribiotech, Inc.

Market Opportunity

The global antimicrobial fertilizer and crop protection market is projected to grow significantly, reaching up to \$10.36 billion by 2030. SINTX intends to position its Si_3N_4 technology at the intersection of sustainability and high-performance crop protection within an industry increasingly focused on sustainable, eco-friendly solutions.

Independent Path for Growth

The new agribiotech subsidiary will operate independently from SINTX’s medical device business, with its own development pipeline. This separation allows for focused resource allocation, technology validation in field settings, and potential partnerships or licensing opportunities with agricultural companies.

“This is more than diversification—it’s about unlocking the full potential of our core material,” said Eric Olson. “We’re establishing a clear path to deploy our Si_3N_4 into vineyards, orchards, farmlands and hydroponic facilities, potentially beginning with one of the most compelling use cases: wine production.”

Silicon Nitride: A Natural Defense Against Crop Disease

Internal research previously published in *Frontiers in Microbiology* demonstrates that silicon nitride provides powerful antifungal protection against *Plasmopara viticola*, the pathogen responsible for grapevine downy mildew, one of the most devastating diseases affecting vineyards globally. The study demonstrated that treating grapevine varieties such as Cabernet Sauvignon and Cannonau with Si_3N_4 reduced the growth and sporulation of *P. viticola* by 80–90%, with complete protection observed in select trials.

Unlike traditional fungicides, SINTX’s Si_3N_4 formulation offers broad-spectrum antimicrobial action without damaging plant tissue or the surrounding environment—especially relevant as copper-based fungicides face increasing regulatory restrictions. (see: *Frontiers in Microbiology*, 2021)

“Silicon nitride doesn’t just inactivate pathogens—it can also prevent most infections altogether,” said Eric Olson, Chairman and CEO of SINTX. “In our recent studies, silicon nitride exhibited no phytotoxicity, helped buffer environmental pH, and showed no evidence of cytotoxicity in humans. It’s a sustainable, high-performance alternative to copper and chemical-based treatments in viticulture.”

For more information about SINTX Agribiotech or silicon nitride applications in medical or agriculture applications, please visit www.sintx.com.

About SINTX Technologies, Inc.

Located in Salt Lake City, Utah, SINTX Technologies is an advanced ceramics company that develops and commercializes materials, components, and technologies for medical and agribiotech applications. SINTX is a global leader in the research, development, and manufacturing of silicon nitride, and its products have been implanted in humans since 2008. Over the past several years, SINTX has utilized strategic acquisitions and alliances to enter new markets. For more information on SINTX Technologies or its materials platform, visit www.sintx.com.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (“PSLRA”) that are subject to a number of risks and uncertainties. Forward-looking statements can be identified by words such as: “anticipate,” “believe,” “project,” “estimate,” “expect,” “strategy,” “future,” “likely,” “may,” “should,” “will” and similar references to future periods.

Readers are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date on which they are made and reflect management’s current estimates, projections, expectations and beliefs. Forward looking statements include our belief that Si₃N₄ will be a sustainable, high-performance alternative to copper and chemical-based treatments in viticulture, our ability to position silicon nitride technology at the intersection of sustainability and high-performance crop protection, and our ability to eventually develop an effective crop protection product and successfully market such a product. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Our actual results and financial condition may differ materially from those indicated in the forward-looking statements. Important factors that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements include, among others, difficulty in commercializing ceramic technologies and development of new product opportunities. A discussion of other risks and uncertainties that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements can be found in SINTX’s Risk Factors disclosure in its Annual Report on Form 10-K, filed with the SEC on March 19, 2025, and in SINTX’s other filings with the SEC. SINTX undertakes no obligation to publicly revise or update the forward-looking statements to reflect events or circumstances that arise after the date of this report, except as required by law.

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