As filed with the Securities and Exchange Commission on April 22, 2025

Registration Statement No. 333-

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

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

MATERIALISE NV
(Exact name of registrant as specified in its charter)

Kingdom of Belgium **(State or other jurisdiction of incorporation or organization)**	**Not Applicable** **(I.R.S. employer identification no.)**

Technologielaan 15
3001 Leuven
Belgium
(Address of principal executive offices)

Warrants Plan 2023
(Full title of the Plan)

Materialise USA, LLC
44650 Helm Ct.
Plymouth, Michigan 48170
Attention: Chief Executive Officer
(734) 259-6445
(Name, address and telephone number of agent for service)

Copies to:

Per B. Chilstrom, Esq.
Fenwick & West LLP
902 Broadway
New York, New York 10010
(212) 430-2600

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☐

PART I
INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

Item 1. Plan Information.

Item 2. Registrant Information and Employee Plan Annual Information.*

* In accordance with Rule 428(b) under the Securities Act, the documents containing the information called for by Part I of Form S-8 will be sent or given to individuals who participate in the Warrants Plan 2023 and are not being filed with or included in this Form S-8. These documents and the documents incorporated by reference in this registration statement pursuant to Item 3 of Part II of Form S-8, taken together, constitute the prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, which have been filed by the registrant with the Securities and Exchange Commission (the “Commission”) are hereby incorporated by reference herein, and shall be deemed to be a part of, this registration statement:

· Annual Report on Form 20-F for the year ended December 31, 2024 filed with the Commission on April 22, 2025; and

· The description of the ordinary shares and American depositary shares (“ADSs”) contained in the registration statement on Form 8-A (File No. 001-36515), filed with the Commission on June 20, 2014 pursuant to Section 12(b) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), as updated by the description of the ordinary shares and ADSs contained in Exhibit 2.3 to the Annual Report on Form 20-F for the year ended December 31, 2020, filed with the Commission on April 30, 2021, and any subsequent amendments or reports filed for the purpose of updating such description.

In addition, all documents filed by the registrant pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this registration statement and prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be a part of it from the respective dates of filing such documents; except as to any portion of any future annual, quarterly or current report or other document that is deemed furnished and not deemed filed under such provisions. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

Item 4. Description of Securities.

Not applicable

Item 5. Interests of Named Experts and Counsel.

Not applicable

Item 6. Indemnification of Directors and Officers.

Under Belgian law, the directors of a company may be liable for damages to the company in case of improper performance of their duties. The registrant’s directors may be liable to the registrant and to third parties for infringement of the registrant’s articles of association or Belgian company law. Under certain circumstances, directors may be criminally liable. The registrant maintains liability insurance for the benefit of its directors and senior management.

In order to provide enhanced liability protection for its directors and to attract and retain highly qualified individuals to act as directors, in connection with this offering, the registrant's board of directors intends to approve the undertaking to indemnify each current and future member of the board of directors to the maximum extent permitted by law, except if the liability or expense is covered by insurance taken by the registrant or if the liability of a director would arise out of such director's fraud or willful misconduct.

In the underwriting agreement related to the initial public offering, the underwriters have agreed to indemnify, under certain conditions, the registrant, its directors and officers and persons who control the registrant within the meaning of the Securities Act, against certain liabilities.

Item 7. Exemption from Registration Claimed.

Not applicable

Item 8. Exhibits.

Exhibit number	Exhibit description
4.1	Restated Articles of Association of Materialise NV (English translation) (incorporated by reference to Exhibit 1.1 to the annual report on Form 20-F for the year ended December 31, 2022)
4.2	Form of Deposit Agreement (incorporated by reference to Exhibit 4.1 to the registration statement on Form F-1 (File No. 333-194982))
4.3	Warrant Plan 2023 (English translation) (incorporated by reference to Exhibit 4.5 to the annual report on Form 20-F for the year ended December 31, 2023)
4.4	Form of Warrant Agreement under Warrant Plan 2023 (English translation) (incorporated by reference to Exhibit 4.3 to the annual report on Form 20-F for the year ended December 31, 2024)
5.1*	Opinion of Intui CV
23.1*	Consent of KPMG Bedrijfsrevisoren BV / KPMG Réviseurs d'Entreprises SRL, independent registered public accounting firm
23.2*	Consent of Intui CV (contained in Exhibit 5.1)
24.1*	Power of Attorney (included in signature page)
107.1*	Filing Fee Table

* Filed herewith.

Item 9. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Exchange Act), that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in Leuven, Belgium on April 22, 2025.

Materialise NV

By: /s/ Brigitte de Vet-Veithen

Name: Brigitte de Vet-Veithen
De Vet Management BV

Title: Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below hereby constitutes and appoints Brigitte de Vet and Koen Berges and each of them, as his attorney-in-fact and agent, with full power of substitution and resubstitution for him in any and all capacities, to sign any or all amendments or post-effective amendments to this registration statement, or any registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with exhibits thereto and other documents in connection therewith with the Securities and Exchange Commission, granting unto such attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary in connection with such matters and hereby ratifying and confirming all that such attorney-in-fact and agent or his substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Name	Title	Date
/s/ Brigitte de Vet-Veithen De Vet Management, represented by Brigitte de Vet-Veithen	Chief Executive Officer and Director (Principal Executive Officer)	April 19, 2025
/s/ Koen Berges Finstraco, represented by Koen Berges	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	April 20, 2025
/s/ Wilfried Vancraen Wilfried Vancraen	Chairman of the Board	April 22, 2025
/s/ Peter Leys Peter Leys	Director	April 22, 2025
/s/ Johan De Lille A Tre C CVOA, represented by Johan De Lille	Director	April 18, 2025
/s/ Hilde Ingelaere Hilde Ingelaere	Director	April 22, 2025
/s/ Sander Vancraen Sander Vancraen	Director	April 22, 2025
/s/ Jürgen Ingels Jürgen Ingels	Director	April 17, 2025
/s/ Jos Vander Sloten Jos Vander Sloten	Director	April 17, 2025
/s/ Lieve Verplancke Lieve Verplancke	Director	April 20, 2025
/s/ Bart Luyten Bart Luyten	Director	April 17, 2025
/s/ Volker Hammes Volker Hammes	Director	April 19, 2025
/s/ Bryan L. Crutchfield Bryan L. Crutchfield	Authorized Representative in the United States	April 22, 2025

ADVOCATEN | AVOCATS | ATTORNEYS

Robbie Tas [0 1 2]
Anneleen Steeno [0 1 2]
Caroline Hotterbeekx * [0 1]
Kim Van Herck [1]
Matthias Jans [1]
Pieter Van Braband * [1]
Olivier Roodhooft [2]
Bert Vanderheiden [2]
Eyman Yourin [2]
Ellen Gijsen [2]
Philippe Van Lierde [2]

* BV
[0] vennoten intui CV
[1] balie Leuven
[2] balie Brussel

MATERIALISE NV
BE 0441.131.254
Technologielaan 15
3001 Leuven, Belgium

MATERIALISE NV - ADVIES SEC
Ons kenmerk: INT08529/ASO/ASO
Datum: 04/04/2025

Dear Sir/Madam,

Intui CV, a law firm incorporated under Belgian law and established at 3000 Leuven, Tiensevest 104, has acted as Belgian legal counsel to Materialise NV (the "**Company**"), a limited liability company (naamloze vennootschap), in connection with the Company's registration statement on Form S-8 (the "Registration Statement"), filed with the U.S. Securities and Exchange Commission (the "**SEC**") under the U.S. Securities Act of 1933, as amended (the "Securities Act"), in relation to the potential issuance of up to 500,000 ordinary shares in the Company resulting from the exercise of the subscription rights granted under the 2023 Warrant Plan (the "**Plan**").

The Company has requested us to issue this opinion in connection with the filing of the Registration Statement, and to confirm under Belgian law that:

- the subscription rights issued under the Plan have been validly created by the Company's board of directors;
- such subscription rights may be validly exercised and converted into ordinary shares of the Company;
- the shares so issued pursuant to such subscription rights will be legally issued, fully paid and non-assessable; and
- such issued shares will include free transferability.

On 11 October 2023, the Company's board of directors resolved to issue 500,000 subscription rights under the Plan, acting under the powers granted by the shareholders meeting on 5 November 2020 in accordance with the Company's authorized capital as set forth in Article 6 of the Company's articles of association.

As explained in the special board report dated 25 September 2023, the subscription rights were issued in the corporate interest of the Company, with the following fourfold purpose:

1. to establish a medium and long-term incentive for selected employees and personnel who can make a significant contribution to the success and growth of the Company and its group (i.e., entities directly or indirectly controlled by the Company);
2. to motivate employees of the Company and the group over the medium and long term;
3. to provide the Company and the group with the means to attract and retain skilled and experienced personnel;
4. to create a shared interest between selected beneficiaries and the Company's shareholders, focused on the increase of the Company's share value.

For the purposes of this opinion, we have reviewed the following documents (the "**Documents**"):

- The coordinated articles of association of the Company dated 28 December 2022;
- The notarial deed dated 11 October 2023, recording the resolution of the board of directors relating to the issuance of 500,000 subscription rights and referring to the authorization granted by the shareholders meeting dated 5 November 2020 to increase the capital within the limits of the authorized capital;
- The special report of the board of directors dated 25 September 2023, prepared in accordance with articles 7:180 and 7:191 of the Belgian Code of Companies and Associations (the "**BCC**");
- The auditor's report issued by KPMG Bedrijfsrevisoren on 29 September 2023 in accordance with articles 7:180 and 7:191 of the BCC;
- The complete text of the Plan;
- A template of the subscription rights agreement to be entered into with individual beneficiaries.

This opinion is based on the assumption that:

- all documents reviewed are authentic, complete, and conform to the originals;
- all factual statements and representations contained in the Documents are accurate and complete;
- all Documents have been executed by the persons whose names are indicated and that those persons had the legal capacity to execute those Documents;
- all shareholders meetings and meetings of the board of directors have been duly convened, and that those meetings were validly held in accordance with the Company's articles of association and the BCC;
- the Plan will be administered in accordance with its terms;
- the subscription rights will be duly granted by the board of directors of the Company and exercised by the beneficiaries in accordance with their terms;
- the subscription rights will be granted through the execution of the individual subscription rights agreements, based on the template provided to us;
- the subscription rights will be duly registered in the Company's securities register in accordance with the BCC;
- upon exercise, the full exercise price will be irrevocably paid to the Company;
- all subscription rights holders will qualify as eligible beneficiaries as defined under the Plan;

Subject to the above, and on the basis of Belgian law in effect as of the date of this letter, we are of the opinion that:

- The issuance of 500,000 subscription rights by the board of directors on 11 October 2023 was validly authorized and effected under the Company's authorized capital, in accordance with the articles of association and the applicable provisions of the BCC;

- These subscription rights can be validly granted and exercised according to the Plan and the template of the subscription rights agreement to be entered into with individual beneficiaries;

- Upon valid exercise of these subscription rights, and subject to full payment of the applicable exercise price, the resulting ordinary shares will be validly issued, fully paid-up and non-assessable;

- The ordinary shares so issued will carry full shareholder rights, including voting and dividend rights, and will be freely transferable under Belgian law and the articles of association.

This opinion is limited to Belgian law and does not extend to any other jurisdiction. We express no opinion on any matters of U.S. law or any factual matters. The term *"non-assessable"* has no legal significance under Belgian law. In this legal opinion the term “non-assessable” is intended to indicate that the holder of the newly issued shares will not be required to make any additional payments beyond the exercise price of the subscription rights.

We consent to the inclusion of this opinion as an exhibit to the filing Registration Statement. In giving this consent, we do not concede that we are within the category of persons whose consent is required under the Securities Act.

Yours sincerely,

/s/ Anneleen Steeno	/s/ Eyman Yourin
Anneleen Steeno	Eyman Yourin

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ADVOCATEN | AVOCATS | ATTORNEYS

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the use of our reports dated April 22, 2025, with respect to the consolidated financial statements of Materialise NV, and the effectiveness of internal control over financial reporting, incorporated herein by reference.

KPMG Bedrijfsrevisoren BV / KPMG Réviseurs d'Entreprises SRL

/s/ Gotwin Victor Jaak Jackers

Zaventem, Belgium
April 22, 2025

Exhibit 107.1

Calculation of Filing Fee Table
Form S-8
(Form Type)

Materialise NV
(Exact name of Registration as Specified in its Charter)

Table 1 – Newly Registered Securities

Security Type	Security Class Title[(1)]	File Calculation Rule	Amount Registered[(2)]	Proposed Maximum Offering Price Per Unit[(3)]	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Ordinary shares, no nominal value per share	Rule 457(c) and Rule 457(h)	500,000	$ 4.54	$ 2,267,500.00	$ 0.00015310	$ 347.15
Total Offering Amounts					$ 2,267,500.00		$ 347.15
Total Fee Offsets							$ 347.15
Net Fee Due							$ 0.00

(1) These ordinary shares with no nominal value per share ("Ordinary Shares") of Materialise NV (the "Registrant") may be represented by American Depositary Shares ("ADS"). Each ADS represents one Ordinary Share. ADSs issuable upon deposit of the Ordinary Shares registered hereby were registered pursuant to a separate registration statement on Form F-6 (File No. 333-196734).

(2) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "Securities Act"), this registration statement shall also cover any additional Ordinary Shares that become issuable under the Registrant's Warrants Plan 2023 (the "2023 Plan") by reason of any stock split, capital increase or decrease or other similar transaction effected without receipt of consideration that increases the number of outstanding Ordinary Shares.

(3) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(h) and Rule 457(c) under the Securities Act, based on the average of the high and low reported sale prices for the ADSs as reported by the Nasdaq Global Select Market on April 15, 2025.

Table 2 – Fee Offset Claims and Sources

	Registrant or Filer Name	Form or Filing Type	File Number	Initial Filing Date	Filing Date	Fee Offset Claimed	Security Type Associated with Fee Offset Claimed	Security Title Associated with Fee Offset Claimed	Unsold Securities Associated with Fee Offset Claimed	Unsold Aggregate Offering Amount Associated with Fee Offset Claimed	Fee Paid with Fee Offset Source
Rule 457(p)											
Fee Offset Claims	Materialise NV	F-3	333-258949	8/20/2021		$347.15	Unallocated (Universal) Shelf (1)	(1)	(1)	$250,000,000	
Fees Offset Sources	Materialise NV	F-3	333-258949		8/20/2021						$27,275

(1) The Registrant previously paid filing fees of $27,275 in connection with the registration statement on Form F-3 (Registration No. 333-258949) initially filed on August 20, 2021, relating to the registration of $250,000,000 maximum aggregate offering price of unallocated securities (all of which remain unsold as of the date hereof, and which unsold securities have been withdrawn from registration). Pursuant to Rule 457(p) of the Securities Act, the Registrant is offsetting the entire filing fee of $347.15 due in connection with the filing of this registration statement against the $27,275 filing fee previously paid.