

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

POST-EFFECTIVE AMENDMENT NO. 1
TO
FORM S-4

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

MOLEKULE GROUP, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

3841
(Primary Standard Industrial
Classification Code Number)

45-3213164
(I.R.S. Employer
Identification Number)

10455 Riverside Drive
Palm Beach Gardens, FL 33410
(833) 652-5326

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Jason DiBona
Molekule Group, Inc.
10455 Riverside Drive
Palm Beach Gardens, FL 33410
(833) 652-5326

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies of all communications, including communications sent to agent for service, should be sent to:

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Approximate date of commencement of proposed sale of the securities to the public: Not applicable.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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 7(a)(2)(B) of the Securities Act.

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer)

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer)

**EXPLANATORY NOTE
DEREGISTRATION OF SECURITIES**

This Post-Effective Amendment No. 1 is being filed solely to remove from registration all 3,519,105 shares of common stock, \$0.01 par value per share (the “Common Stock”), of Molekule Group, Inc. (the “Registrant”) that were registered on the Registration Statement on Form S-4 (Registration No. 333-272644) (the “Registration Statement”) filed with the Securities and Exchange Commission (the “Commission”) on June 14, 2023, as amended by Amendment No. 1, filed with the Commission on June 30, 2023. The Registration Statement was declared effective on July 12, 2023.

As described in the Registration Statement, the shares of Common Stock were to be issued upon consummation of the merger (the “Merger”) as contemplated by the Agreement and Plan of Merger, dated as of February 26, 2023 (the “Merger Agreement”), by and among the Registrant, Aura Smart Air Ltd. (“Aura”), a company organized under the laws of the State of Israel and Avatar Merger Sub Ltd., a company organized under the laws of the State of Israel and a wholly owned subsidiary of the Registrant.

As previously disclosed by the Registrant, on August 14, 2023 the Registrant terminated the Merger Agreement, in accordance with Section 8.02 and Section 8.01(c)(i) of the Merger Agreement. The Registrant has not, and will not, issue any of the shares of Common Stock registered under the Registration Statement and no shares of Common Stock were sold pursuant to the Registration Statement or otherwise.

In accordance with an undertaking made by the Registrant in the Registration Statement to remove from registration by means of a post-effective amendment any of its securities being registered under the Registration Statement that remain unsold at the termination of the offering, the Registrant hereby amends the Registration Statement to remove from registration all shares of Common Stock that were registered under the Registration Statement as of the date hereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, and Rule 478 thereunder, the Registrant has duly caused this Post-Effective Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Palm Beach Gardens, State of Florida on September 8, 2033.

Molekule Group, Inc.

By: /s/ Jason DiBona

Jason DiBona

Chief Executive Officer

No other person is required to sign this Post-Effective Amendment to the Registration Statement in reliance upon Rule 478 under the Securities Act of 1933, as amended.
