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

FORM 6-K

**Report of Foreign Private Issuer
Pursuant to Rule 13a-16 or 15d-16
under the Securities Exchange Act of 1934**

For the month of June 2018

Commission File Number 000-12790

ORBOTECH LTD.

(Translation of Registrant's name into English)

7 SANHEDRIN BOULEVARD, NORTH INDUSTRIAL ZONE, YAVNE 8110101, ISRAEL
(Address of principal executive offices)

Indicate by check mark whether the Registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

Form 20-F Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Information Contained in this Report on Form 6-K

On June 18, 2018, the Japan Fair Trade Commission provided antitrust clearance for the proposed merger involving KLA-Tencor Corporation (“KLA-Tencor”) and Orbotech Ltd. (“Orbotech”).

Additional Information and Where to Find It

This report is provided in respect of a proposed business combination involving KLA-Tencor and Orbotech. This report does not constitute an offer to sell or the solicitation of an offer to buy or subscribe for any securities or a solicitation of any vote or approval nor shall there be any sale, issuance or transfer of securities in any jurisdiction in which such offer, solicitation, sale, issuance or transfer would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. The proposed transaction will be submitted to the shareholders of Orbotech for their consideration through the proxy statement/prospectus described below. On May 16, 2018, KLA-Tencor filed with the SEC a Registration Statement on Form S-4 (the “Registration Statement”) that included a preliminary proxy statement/prospectus with respect to Orbotech in connection with the merger of an indirect subsidiary of KLA-Tencor with and into Orbotech, with Orbotech surviving, and with respect to KLA-Tencor’s common stock to be issued in the proposed transaction. The Registration Statement was amended and declared effective on June 7, 2018, and a copy of the final proxy statement/prospectus contained therein was first made available to Orbotech shareholders on June 7, 2018 and was mailed to Orbotech shareholders on or about June 15, 2018. KLA-Tencor and Orbotech also plan to file other documents with the SEC regarding the proposed transaction.

This report is not a substitute for any prospectus, proxy statement or any other document that KLA-Tencor or Orbotech has or may file with the SEC in connection with the proposed transaction. Investors and security holders of KLA-Tencor and Orbotech are urged to read the proxy statement/prospectus and any other relevant documents that will be filed with the SEC carefully and in their entirety when they become available because they will contain important information about the proposed transaction.

You may obtain copies of all documents filed with the SEC regarding this transaction, free of charge, at the SEC’s website (www.sec.gov). In addition, investors and security holders will be able to obtain free copies of the proxy statement/prospectus and other documents filed with the SEC by KLA-Tencor on KLA-Tencor’s Investor Relations page (<http://ir.kla-tencor.com>) or by writing to KLA-Tencor Corporation, Investor Relations, 1 Technology Drive, Milpitas, CA 95035 (for documents filed with the SEC by KLA-Tencor), or by Orbotech on Orbotech’s Investor Relations page (investors.Orbotech.com) or by writing to Orbotech Ltd., Investor Relations, 7 Sanhedrin Boulevard, North Industrial Zone, Yavne 8110101 Israel (for documents filed with the SEC by Orbotech).

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, thereunto duly authorized.

ORBOTECH LTD.
(Registrant)

By: /s/ Alon Rozner

Alon Rozner
Corporate Vice President and
Chief Financial Officer

Date: June 19, 2018