Thematic Section: Pharmacological Research. **Full Paper**

Subsection: Gas Chromatography.

Registration Code of Publication: 14-38-4-83

The article is published on the materials of the report to the Scientific and Practical Conference "New Chemical-Pharmaceutical Technologies" held in May 28, 2014 at D.I. Mendeleev RCTU.

Publication is available for discussion in the framework of the on-line Internet conference "Butlerov readings".

http://butlerov.com/readings/ Contributed: July 18, 2014.

Gas chromatographic determination of tween 80 in the finished dosage forms of medicines derived from human blood plasma

© Alexey E. Kovalenko, 1,2 Dmitry A. Kardonsky, 1,2 Alexander A. Eganov, 1,2 Olga G. Stepanova, Svetlana V. Shestakova, and Irina I. Pleshakova²⁺

¹ Research Institute of Pharmacy of the I.M. Sechenov First Moscow State Medical University.

Novocheremushkinskaya St., 45. Moscow, 117418. Russia.

Phone: +7 (499) 128-33-92. E-mail: aekov@muctr.ru

² Department of Expertise in Dope and Drug Control. Mendeleev University of Chemical Technology of Russia. Panfilov Heroes St., 20. Moscow, 125480. Russia.

Phone: +7 (495) 495-24-26. E-mail: pleshakova.11@bk.ru

*Supervising author; *Corresponding author

Keywords: Tween 80, the liquid-liquid extraction, gas chromatography.

Abstract

A simple and reliable method for the quantitative determination of Tween 80 in finished dosage forms of medicines derived from human plasma was developed. Tween 80 is isolated from FDF by liquid-liquid extraction and analyzed by gas chromatography with flame ionization detection (GC/FID). Quantitative determination of tri-n-butyl phosphate is carried out using stearic acid as internal standard.