

## Sample description

Table 1 – analyzed sample description.

Description	Active ingredient	Nominal value
Sust300 300 mg/ml 10 ml Mix of Testosterones UFC Pharm (pic 1)	Mix of Testosterones	300 mg/ml



Pic. 1 – Sample appearance.

## Sample preparation for analysis

Table 2 – Sample preparation.

Preparation
50 ul of the sample was mixed with 1500 ul dichloromethane in a vial.

## Analysis

### Chromatographic separation (GC).

Column: Tr-5ms, 30 m.

Carrier gas: helium.

Flow rate: 1.2 ml/min.

Split flow rate: 12 ml/min.

Split: 10.

Injector: PTVinjector, final temperature (transfer) 290 °C.

Inject 1ul.

Split program in table 3.

Table3 – splitprogram.

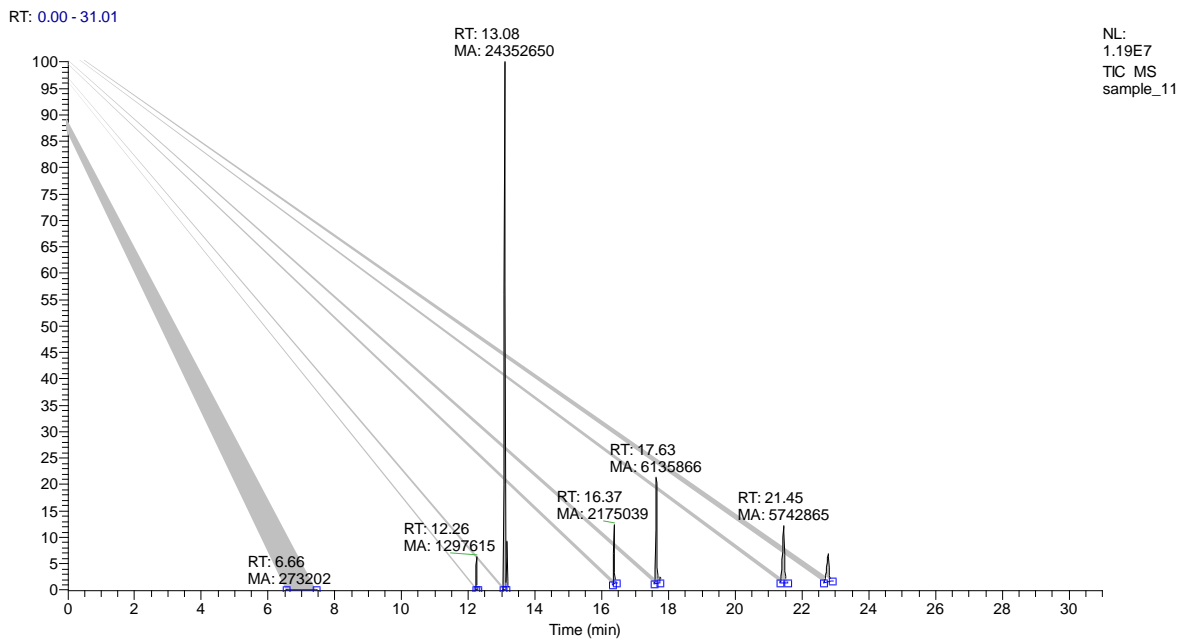
<b>Ramp</b>	<b>Rate (°C/min)</b>	<b>Temp, °C</b>	<b>Hold</b>
Initial		35	1.70
Ramp 01	30	41	2.00
Ramp 02	20	310	15

Mass-spectrometricdetector (ionictap) wasusedfordetection (m/z 50-650).

Identification: DBNist, librarySWDrug.

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# Sample.



Pic 2 – Chromatogram of the sample. Retention time of active ingredient is 16.37, 17.63, 21.45, 22.78 min.

Table 4 – Identified ingredients of the sample.

Retention time	Substance	Peak area	Response factor	content, mg/ml
6.78	Benzyl alcohol	67 198	0.56	
13.07	Ethyl oleate	24 352 650		
16.37	Testosterone propionate	2 175 039		37
17.63	Testosterone isocaproate	6 135 866		106
21.45	Testosterone decanoate	5 742 865		100
22.78	Testosterone phenylpropionate	3 297 787		57

## Results

Table 5 – Analysis results.

Active ingredient	Content of an active ingredientmg/ml	Foundexipients
Testosterone propionate	37	Benzylalcohol. Ethyl oleate.
Testosterone isocaproate	106	
Testosterone decanoate	100	
Testosterone phenylpropionate	57	