## VODKA 79%

| Name of indicators   | Value as per technological regulations | Measured value of<br>parameter |
|--|--|--------------------------------|
| Strenght, %  | 79.0+-0.2                              | 79.0                           |
| Hydrochloric acid volume C(HCl)=0,1 mole/dm3, used for titration of 100 cm3 of vodka, cm3  | Not more than 2.0                      | 0.1                            |
| Mass concentration of acetaldehydes evaluated in anhydrous alcohol, mg/ dm3  | Not more than 3.0                      | <0.5                           |
| Mass concentration of fusel oil: 1-propanol, 2-<br>propanol, isobutyl alcohol, 1-butanol, isoamyl alcohol<br>in 1dm3 of anhydrous alcohol, mg/ dm3 | Not more than 5.0                      | 0.58                           |
| Mass concentration of esters – methyl acetate and ethyl acetate in anhydrous alcohol, mg/dm3   | Not more than 5.0                      | <0.5                           |
| Volume part of methyl alcohol evaluated in anhydrous alcohol, %  | Not more than 0.01                     | 0.00085                        |
| Furfural presence  | Not permitted                          | Not permitted                  |

## ETHANOL

| Name of indicators  | Value as per technological regulations | Measured value of<br>parameter |
|---|--|--------------------------------|
| Ethyl alcohol volume ratio, %, at least   | 96.30                                  | 96.40 at 20°C                  |
| Purity test with sulphuric acid   | Pass                                   | Pass                           |
| Oxidation test, min, at 20°C, at least  | 22                                     | 24                             |
| Mass concentration of acetaldehyde on an anhydrous alcohol basis, mg/dm3, not more than   | 1.0                                    | less than 0.5                  |
| Mass fusel oil concentration: - 1-propanol, 2-propanol,<br>isobutyl alcohol, 1-butanol, isoamyl alcohol equivalent<br>to anhydrous alcohol, mg/dm3, not more than | 5.0                                    | 1.2                            |
| Mass compound esters concentration of: - methyl acetate and ethyl acetate equivalent to anhydrous alcohol, mg/dm3, not more than                                  | 5.0                                    | less than 0.5                  |
| Methyl alcohol volume ratio equivalent to anhydrous alcohol, mg/dm3, not more than  | 0.01                                   | 0.0002                         |
| Mass free acids concentration (w/o CO2) equivalent to anhydrous alcohol, mg/dm3, not more than  | 8.0                                    | 5.6                            |
| Furfural content  | Non tolerable                          | None                           |
| Cs-137 Radonuclide activity volume, Bq/l, not more than   | 370                                    | 10.38                          |

## CONCENTRATE OF HEAD AND INTERMEDIATE IMPURITIES OF ETHYL ALCOHOL

| Name of indicators   | Value as per technological regulations | Measured value of<br>parameter |
|--|--|--------------------------------|
| Volume part of ethyl alcohol, %  | 40.0-95.0                              | 86.30                          |
| Mass concentration of acetaldehydes evaluated in anhydrous alcohol, mg/ dm3  | 1.0-50.0                               | 3.41                           |
| Mass concentration of esters – methyl acetate and ethyl acetate in anhydrous alcohol, mg/dm3   | 2.0-100.0                              | 61.45                          |
| Mass concentration of fusel oil: 1-propanol, 2-<br>propanol, isobutyl alcohol, 1-butanol, isoamyl alcohol<br>in 1dm3 of anhydrous alcohol, mg/ dm3 | 2.0-300.0                              | 75.77                          |
| Volume part of methyl alcohol evaluated in anhydrous alcohol, %  | 0.01-10.0                              | 0.29                           |