

ETHANOL 96% ENA SPECIFICATION FOR MEDICAL, ALCOHOLIC BEVARGES, COSMETIC INDUSTRY

TEST	Method	Unit	Specification	Result
Appearance	visual		clear liquid	clear liquid
Color	visual		colorless	Colorless and limp
Taste			burning	burning
Odor			neutral	neutral
Alcohol content at 20 C	EC 625/2003	% v/v	min. 96,0	96,4
Aldehydes content as acetaldehyde	EC 625/2003	g/hl p.a.	max. 0,5	0,043
Acids content as acetic acid	EC 625/2003	g/hl p.a.	max.1,5	0,011
Esters content as ethyl acetate	EC 625/2003	g/hl p.a.	max. 1,3	0,058
Higher alcohols total as 2-methylpropan-1-ol	GLC	g/hl p.a.	max. 0,5	0,040
Methyl alcohol	EC 625/2003	g/hl p.a.	max. 50	2
Benzene	OGC/SGS ETOH 0001-10			Absent
Furfural	EC 625/2003		Not detectable	Not detectable
Saval test	visual		Sustain	Sustain
Crotonaldehydes	OGC/SGS ETOH 0001-10	g/hl		Absent
Hydrocarbons	OGC/2007/SOP-IEH/03			Absent
Permanganate test	EC 625/2003	min/20°C	min. 18	26
Volatile basis containing nitrogen	EC 625/2003	g/hl p.a.	max. 0,1	<0,01
Dry substance	EC 625/2003	g/hl	max. 1,5	0,2
Density	ASTM D 4052	g/ml	-	0,804
Mass concentration of free acids (without CO ₂) in anhydrous alcohol	EC 625/2003	g/hl		0,514
Mass concentration of fusel oil in recalculation of isoamilic and isobutyl alcohol mixing (3:1) in anhydrous alcohol		g/hl	max .0,5	0,040
Color			Colorless	Colorless
Tasting Note				8,8
Purification with Sulfuric Acid			Stand	Stand
The concentration in weight of Acids	SM GOST R52473-10	Mg/dm ³ p.a.	8	5,6
Toxic Elements Cesium 137	MBN1181-2007		70	2,1
Toxic Elements Strontium 90	MBN1181-2007		100	<20
The concentration in weight of Super Alcohols	PS-21-MI-GC-LI	Mg/dm ³ p.a.	5	<0,9
Propanol				<0,7
Butanol				<0,9
Isobutanol				<0,8
Isoamylalcohol				<0,9
C14 Content	EC 625/2003	CBq/gC		0,18
UV Content (with n-Hexane)	Spectrometric	270 nm	Max. 0,02	0,008
		240 nm	Max. 0,08	0,066
		230 nm	Max. 0,18	0,128
* Not Detected : <LOQ		220 nm	Max. 0,30	0,250
* p.a.: As 100% pure alcohol				

Ethanol is agriculture origin and not dangerous for human consumption under the limit.
 100% of the Ethanol are originated from corn. Not produced through dehydration process.

Ethanol corresponds with the REGULATION (EC) No 110/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 January 2008 on the definition, description, presentation, labeling and the protection of geographical indications of spirit drinks and repealing Council Regulation (EEC) No 1576/89.