

SPECIFICATION

Ethanol(99.5)

for Medicine Test

REQUIREMENT	SPECIFICATION
* Appearance	Colorless clear liquid
Assay (C ₂ H ₅ OH) (GC)	min.99.5%(mass/mass)
Density (20°C)	0.789~0.791g/ml
Water	max.0.2%(mass/mass)
** Residue after evaporation	max.5ppm(mass/mass)
Acidity (as CH ₃ COOH)	max.0.002%(mass/mass)
Alkalinity (as NH ₃)	max.1ppm(mass/mass)
Aldehydes and ketones (as CH ₃ COCH ₃)	max.0.001%(mass/mass)
Methanol (CH ₃ OH)	max.0.02%(mass/mass)
2-Propanol [(CH ₃) ₂ CHOH]	max.0.01%(mass/mass)
1-Propanol (CH ₃ CH ₂ CH ₂ OH)	max.0.005%(mass/mass)
1-Butanol [CH ₃ (CH ₂) ₂ CH ₂ OH]	max.0.005%(mass/mass)
Substances reducing permanganate	to pass test
Substances darkened by sulfuric acid	to pass test
Assay (USP-NF)	minimum 99.5%
Water (H ₂ O) (USP-NF)	maximum 0.2%
Color (APHA) (USP-NF)	maximum 10
Solubility in water (USP-NF)	to pass test
Residue after evaporation (USP-NF)	maximum 0.001%
Acetone, isopropyl alcohol (USP-NF)	to pass test
Titration acid (USP-NF)	maximum 0.0005meq/g
Titration base (USP-NF)	maximum 0.0002meq/g
Methanol (CH ₃ OH) (USP-NF)	maximum 0.1%
Substances darkened by sulfuric acid (USP-NF)	to pass test
Substances reducing permanganate (USP-NF)	to pass test
Appearance (Ph.Eur.)	to pass test
Acidity or alkalinity (Ph.Eur.)	to pass test
Relative density (Ph.Eur.)	0.790~0.793
Absorbance (Ph.Eur.)	-

Absorbance (240nm) (Ph.Eur.)	maximum 0.40
Absorbance (250~260nm) (Ph.Eur.)	maximum 0.30
Absorbance (270~340nm) (Ph.Eur.)	maximum 0.10
Volatile impurities (Ph.Eur.)	to pass test
Residue on evaporation (Ph.Eur.)	maximum 25ppm m/v

JIS K 8101:2006(*:Additional test performed by Wako but not required by JIS)(**:The specification is originally set by Wako not JIS)(USP-NF)(Ph.Eur.)